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# Credibility Of Comparative Price Retail Advertising

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# CREDIBILITY OF COMPARATIVE PRICE RETAIL ADVERTISING

by

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ABSTRACT

Consumer reaction to comparative price advertising has strategy implications for both retailers and the Federal Government. As part of its increased involvement in consumer protection, the Federal Government has established policies to protect the consumer from false advertising. Its concern is that consumers are being misled by untruthful price advertising. Retailers have used this marketing practice for a considerable time but the conditions under which comparative price offers are effective are not clear. Little is known about consumer reaction to the retailer and the discount size offered in price advertisements.

This research examined the credibility of comparative price retail advertising. The objectives were to determine the extent of consumer belief of comparative price retail advertisements and to determine, within the limits of the investigation, the factors which influenced belief of price advertisements.

The research employed a field study in which a representative sample of 332 housewives were questioned about actual comparative price advertisements. Different sets of advertisements were pre-selected to provide variability in discount size, advertiser and product. The advertisement sets constituted experimental treatments; particular sets were assigned randomly to respondents. Several questions were asked about the advertisements, such as whether the respondent believed the quoted regular price was that usually charged by the store, and whether she thought the sale price was the lowest price in town. After these

questions, semantic differential ratings of the subject stores, shopping experience and socio-economic data were obtained.

Three somewhat different measures of credibility were identified in preliminary data analysis and tabulated to provide a view of aggregate sample results. The subsequent analysis examined the effect of store, discount size, social class and shopping experience on credibility.

The findings portray the consumer as a fairly careful information processor. There was little evidence of stereotyped or naive responses to the discount claims. Variations in discount size, advertiser and shopping experience significantly altered response to the advertisements. Socio-economic variables were not related to the credibility measures.

The findings also revealed that consumers reacted to price advertising on two dimensions - credibility and price competitiveness. Belief in the quoted regular price was related to store credibility and message credibility. Belief that the quoted sale price was the lowest price in town was related to the perceived price competitiveness of the store and the price competitiveness of the discount size. The findings and their implications were thoroughly explored.

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# CHAPTER I

## INTRODUCTION

Comparative price advertising[1] is the offer of products at less than the normal selling price. Retailers have used this marketing practice for a considerable time but the conditions under which comparative price offers are effective are not clear. Little is known about consumer reaction to the retailer and to the discount size offered in price advertisements.

The Federal Government has been concerned about consumer reaction to price advertising. As part of its increased involvement in consumer protection, it has established policies to guard against false advertising. Particular emphasis has been placed on the elimination of misleading price advertising - promoting the sale of an item by misleading consumers about the price at which the item is normally sold.

A critical issue is the credibility consumers place on comparative price advertising. If they believe price advertising without question, there is high priority for ensuring that they are told the truth. The Federal Government's concern that retailers are misleading consumers because of the consumer's inability to protect himself is justified. On

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[1] Comparative price advertising synonomous with "price-off" advertising or price advertising, describes advertisements containing a regular price and a sale price, thus offering a comparison in prices.

the other hand, if consumers are hypercritical of advertising, the need is great to ensure everything they read or hear is true so that advertising can be restored to a useful position.

A middle ground exists between these two positions. If consumers act as reasonably intelligent processors of information and are capable of protecting themselves to a great extent, the problem is reduced. The priority is changed.

This research examined the credibility of comparative price retail advertising. The objectives were:

1) To determine the extent of consumer belief of comparative price retail advertisements.
2) To determine, within the limits of the investigation, the factors which influenced consumer belief of price advertisements.

The results provided an understanding of how consumers processed this advertising information. From this, an evaluation was made as to the capability of consumers to protect themselves when they encounter comparative price advertisements.

The research employed an experimental design using a survey questionnaire as the data collection method. The experimental design consisted of different sets of comparative price advertisements. It was structured to test the effect of the retailer, the size of discount, and the social class of the consumer on the credibility of comparative price advertisements.

The remainder of the chapter contains three sections. The first reports on the Federal Government's involvement with comparative price

advertising. A short history of their activities is provided along with some considerations the government might make in addressing this consumer protection problem. The next section examines comparative price advertising from the retailer's viewpoint. The organization of the study is outlined in the final section.

## Federal Government Involvement With Comparative Price Advertising

During the last few years, the Federal Government has increased its involvement in the consumer protection area. Most noteworthy was the creation, in 1967, of the Department of Consumer and Corporate Affairs. The objective of the Department was to ensure just and fair economic treatment for consumers, investors and businessmen.[2] The Department's philosophy concerning consumer protection was reflected in a statement by the current Minister:

> The Canadian consumer demands honesty in the marketplace. Our society has rejected the old concept of "caveat emptor" - let the buyer beware - in favor of let the seller take care.[3]

Evidence of this philosophy was present in the Federal Government's campaign against misleading price advertising.

### 1. Review of Government Actions Concerning Misleading Price Advertising

In 1960, the Federal Government introduced legislation into the Combines Investigation Act banning misleading price advertising. The

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[2] "The Department and its Functions", Pamphlet, Department of Consumer and Corporate Affairs, Ottawa, p.2.

[3] "Is It Really a Bargain?" Consumer Communique, Department of Consumer and Corporate Affairs, Consumer Service and Information Division, April, 1969.

ban is found in Section 33C as follows:

> 33C (1) Everyone who, for the purpose of promoting the sale or use of an article, makes any material misleading representation to the public, by any means whatever, concerning the price at which such or like articles have been, are, or will be, ordinarily sold, is guilty of an offense punishable on summary conviction.
>
> (2) Subsection (1) does not apply to a person who publishes an advertisement in the ordinary course of his business.

An example of a typical prosecution under Section 33C illustrates the interpretation of the law. An advertisement, published by Eddie Black's Limited, was circulated as a supplement to one issue of a Toronto newspaper. The advertisement offered photographic equipment at "sale" prices compared with "regular" prices. The Crown provided evidence that the advertised "regular" prices were not those prevailing in Eddie Black's Limited selling area nor were they prices at which that company had been selling in the recent past. The accused was convicted on the evidence.[4]

The key element in cases prosecuted under Section 33C has been that the "regular" price must be the price at which the goods have actually been sold by the majority of the dealers in the same market area. If the Crown can prove the "regular" price was not the "prevailing" price, the prosecution has been successful.[5]

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[4] Report of the Director of Investigation and Research, Combines Investigation Act, Department of Consumer and Corporate Affairs, Queen's Printer, Ottawa, 1968, Catalogue Number RG51-1968, pp. 62-63.

[5] For an excellent summary of the cases prosecuted under Section 33C of the Combines Investigation Act see; Ronald I. Cohen, The Regulation of Misleading Advertising in Canada: A Comparative Approach, Canadian Consumer Council, Ottawa, November, 1970, Chapter VI.

Another important factor in deciding these cases has been how a "reasonable man" would interpret the offer for sale. The following test was applied in one case.

(a) Would a reasonable shopper draw the conclusion from the red band with the words and numbers "Special $1.49", that he was being offered Economy Size Halo Shampoo at a price below which that size bottle is ordinarily sold?

(b) If the answer is "yes", would such a representation be true?[6]

This test has been the standard model of the "reasonable man". A significant departure was taken in a prosecution under Section 33D involving false and misleading advertising. The judge stated:

> In my view, that (the average person or the "reasonable man") is not the test to be applied. Section 33D makes no reference to standards such as those. It seems to me that the protection offered by the Section is for "the public - that vast multitude which includes the ignorant, the unthinking, and the credulous", to use an expression that appears in Federal Trade Commission Prosecution cases in the United States.[7]

This new standard has not been applied to charges laid under Section 33C. However, in the opinion of an experienced barrister this new standard, i.e. the "unthinking man", will be adopted in respect of charges laid under Section 33C and 33D.[8]

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[6]Report of the Director of Investigation and Research, op. cit., 1971, p. 16.

[7]Regina v. Imperial Tobacco Products Limited, Supreme Court of Alberta, Edmonton, October 15, 1970.

[8]Based on personal correspondence between Mr. R. S. Engle, Barrister and Soliciter, and the writer.

Enforcement of this new standard is a decision to be made by the Federal Government. The decision should be based on the cost and benefit associated with enforcement which, in turn, is dependent upon the assumptions made about the consumer's ability to protect himself. These assumptions are discussed in the following section.

The number of prosecutions under Section 33C are reported by year in Table 1. Of the 94 prosecutions, 67 were undertaken after 1967 following the establishment of the new government department. This dramatic increase in the number of prosecutions is likely to continue. The Department of Consumer and Corporate Affairs appointed five regional investigators of misleading advertising in July, 1970.[9] Their job is to probe offences under the Combines Investigation Act related to deceptive advertising, i.e. Sections 33C and 33D.

The 94 prosecutions have resulted in 80 convictions or pleas of guilty. Of the 94 cases, 82 were against retailers; the remainder against manufacturers and distributors. The majority of the retailer prosecutions related to advertisements in daily newspapers. The products in these cases included cameras (11), television sets (10), radios and record players (8), carpets (7), watches (5) and records (3). The average fine per case has been approximately $280 although maximum fine is $500 per count.[10]

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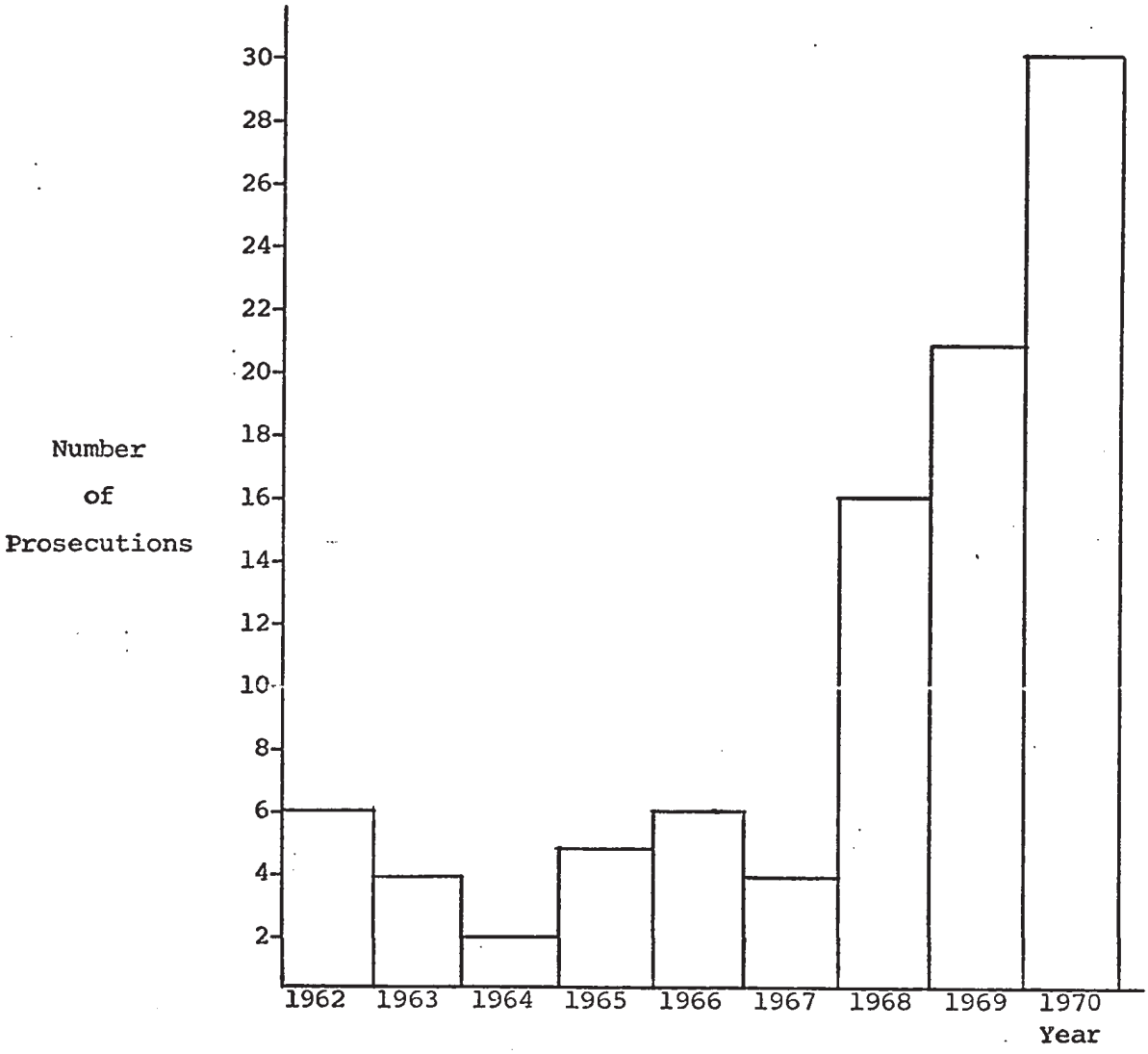
[9]"Basford's Ad Squad Goes Into Action," Marketing, LXXIV, (July 27, 1970), 1, 13.

[10]Cohen, op. cit., p. 77.

TABLE 1. Prosecutions undertaken by the Federal Government under Section 33C of the Combines Investigation Act, by year[1]




[1] To November 30, 1970

Source: Report of the Director of Investigation and Research, Combines Investigation Act, Queen's Printer, Ottawa, Catalogue No. RG51.

## 2. Potential Government Considerations Concerning Comparative Price Advertising

By its actions, the Federal Government has served notice that misleading price advertising is a consumer protection problem of some importance. In attempting to solve this problem, two basic questions should be considered. First, what is the level of resources to be expended in the area? Second, how should the resources be allocated?

A number of factors could be considered in calculating the resources. One is the extent to which retailers make untruthful statements in comparative price advertisements. Another is the importance of the misleading advertising problem, relative to other societal problems which require government attention. An important factor is the consumer's ability to protect himself. The investigation focuses on this.

The consumer's ability to protect himself could be measured by various methods related to the decision making processes consumers use in purchasing products. For example, if consumers relied only on retail advertising in newspapers in making their purchase decisions, then the accuracy of retailers' statements is of greater importance than is the case where more than one information source is considered.

A study of information-seeking by furniture and television buyers reported that newspaper advertising was the most widely-used source of out-of-store information.[11] The same study found that, in making price comparisons, newspaper advertising was the second most

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[11] Bruce LeGrand and John G. Udell, "Consumer Behavior in the Marketplace", Journal of Retailing, XXXX, (Fall, 1964), 32-40, 47-48.

helpful source, the first being store visits. This kind of study provides relevant information in determining the importance of newspapers as an information source for consumers in purchasing products. Similarly, the extent to which consumers believe comparative price retail advertisements is another measure of the problem size. The Federal Government has been operating on the assumption that the stated prices in comparative price advertisements are believed and acted upon by consumers.

From the perspective of the government department responsible for this area of consumer protection, it would be appropriate to examine this assumption. Do consumers believe and act on the statements contained in comparative price advertisements? The problem can be more clearly defined if an understanding is obtained of how the consumer handles the information in a comparative price advertisement. Do consumers believe the quoted regular prices in these advertisements, regardless of the retailer or the discount size offered? A lack of discrimination would suggest that the potential existed for untruthful advertising to mislead consumers.

The proportion of consumers who believe the quoted regular prices is an indication of the problem. If consumers are asked to evaluate honest comparative price advertisements, why shouldn't they believe the quoted regular price? If a high proportion don't, it is an indication that consumers are becoming extremely critical of advertising.

The impact of the advertisement is another important consideration. Does the consumer believe the quoted sale price is the best available price? This is one measure of the influence of comparative

price advertising on purchase behavior. It would seem reasonable to assume that consumers who think the quoted sale price is the best available price are more likely to purchase the product than are those consumers who don't.

Simply stated, consumer belief in the regular/sale prices in comparative price advertisements will provide information on:

a) The influence of different factors - the retailer, the size of discount - on credibility.

b) The level of credibility attained by comparative price advertisements.

c) The possible impact of comparative price advertisements on purchase behavior.

This information can be employed to evaluate:

a) The consumer's capability in processing the information and his ability for self-protection.

b) The level of resources the government might provide for consumer protection from misleading advertisements.

c) The degree of consumer distrust of comparative price advertisements.

This research gathered the information within a limited setting. Consumers were presented with a number of comparative price retail advertisements and asked questions concerning their belief in the quoted regular price and sale price. The findings were used to assess the consumer's ability to process the information contained in comparative price retail advertisements. Based on this assessment, his capacity for self protection was judged.

It should be recognized that this area of consumer protection has a certain political value. The statements of government officials who attack advertising have received front page coverage in newspapers.[12] Thus, the resource level may not reflect the magnitude of the problem but rather the value it has, in terms of favorable publicity, for the government and government officials.

Given a particular level of resources, the government could pursue a number of strategies, shown in Table 2, in order to protect the consumer. The general approach could be selective or nonselective, and the strategies directed at the retailer and/or the consumer. In theory, the strategies should be designed to obtain some maximum benefit for a given resource allocation. This suggests a selective approach, with the strategies directed towards particular areas where the problem is greatest. Government efforts should be concentrated in situations where comparative price retail advertising has the greatest potential for abuse, that is, where consumers are most likely to believe comparative price advertisements and therefore be misled by untruthful advertising.

By concentrating their efforts on the "high potential abuse" situations, the government can reduce or possibly eliminate misleading advertising in these areas. For example, if the findings indicate that large sizes of discounts, i.e. 50 percent off, lead to a high degree of

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[12] For example, "Misleading Ads Claimed Threat to Economy", The London Evening Free Press (London, Canada), December 5, 1970, p. 1 and "Eaton's, Shell and Simpsons Sears Charged With Deceptive Advertising," The Globe and Mail, July 31, 1970, p. 1.

TABLE 2. Actions available to the Federal Government with respect to misleading price advertising

| TARGET OF ACTION | APPROACH | | | | | |
|---|---|---|---|---|---|---|
| | SELECTIVE | | | NONSELECTIVE | | |
| | Degree of Action | | | Degree of Action | | |
| | Moral Suasion | Warning | Prosecution | Moral Suasion | Warning | Prosecution |
| RETAILER | | | | | | |
| -Type of Retailer | | | | | | |
| -Kind of Product | | | | | | |
| -Size of Discount | | | | | | |
| -Geographic | | | | | | |
| | EDUCATION PROGRAMS | | | EDUCATION PROGRAMS | | |
| CONSUMER | | | | | | |
| -Social Class | | | | | | |
| -Geographic | | | | | | |

belief that the sale price is the best price in town, then the government could monitor and/or prosecute retailers employing these advertisements more than others. Further, if the government clearly stated its intentions, it is likely that retailers would be more cautious in making price claims that could not be substantiated.

This research explored three of the possible situations which could influence the credibility of comparative price advertising. The influence of the retailer, the size of discount and the respondent socio-economic class on the credibility of comparative price advertisements were examined. Different products were used in order to generalize the findings.

## Retail Price Advertising

Comparative price advertising is widely employed by retailers. In a study of newspaper advertisements by retailers in 11 United States cities, approximately one-fourth of the advertisements used comparative prices.[13] No comparable Canadian study has been conducted but a similar relationship probably exists for Canadian retailers. In Canada, the level of expenditures in daily newspapers for retail advertising is over $125 million per year.[14] The above data suggests that approximately one-fourth of this is spent on comparative price advertising.

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[13] Thomas J. Hogan, "Shoppers Can Tell a Bargain", (Unpublished Study, Duquesne University, 1960).

[14] Retail advertising expenditures in daily newspapers in 1967 were $126,705,000.00, Dominion Bureau of Statistics, Printing, Publishing, and Allied Industries, 1967, Catalogue Number 36-203.

Advertising serves a dual purpose for retailers: it creates a general image of the store for consumers and it aids in selling merchandise. Comparative price advertising is employed mainly to establish a low or competitive price image and to sell specific merchandise items. The retailer has two decisions to make with respect to comparative price advertising - the frequency of use and the size of the offered discount. No significant empirical research has been conducted on the effects of these retailer decisions.[15]

The issue for the retailer is the costs and benefits attached to the decisions. The extensive use of price advertising is likely to create a competitive price image for the store. However, extensive price advertising might also reduce the consumer's confidence in the reliability of the store's advertising claims. Consumers may be suspicious of the advertising of a store which constantly offers products at reduced prices. The consumer image of the retailer who limits the use of price advertising would be reversed.

The retailer should consider if a competitive price image or a reliable advertising image helps him sell merchandise. For example, does a competitive price image increase the likelihood of a consumer believing the sale price in a comparative price advertisement is the best available price?

Similarly, the retailer should be concerned about consumer reaction to the discount size. Presumably, the larger the discount, the more likely it is that consumers will think it a good buy. The question

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[15] Richard L. Miller, "Dr. Weber and the Consumer", Journal of Marketing, XXVI, (January, 1962), 57-61.

is, does this assumed effect of the discount size apply regardless of the consumer image of the store?

This research investigated these issues by examining the influence of the retailer, the size of discount and the respondent's socio-economic class on the credibility of comparative price advertisements. The findings provided a measure of:

a) The effect of frequency of use of comparative price advertising on store image.

b) The effect of store image and discount size offered on consumer reaction to the stated regular and sale price in comparative price advertisements.

c) The combined effect of the store and the discount size on consumer reaction to comparative price advertisements.

While the object of this study was to assess, in general, the credibility of comparative price retail advertising, generality of the findings was constrained by the particular advertisements used in the survey and the consumers who were sampled. Possible limitations of the results are fully discussed in the final chapter.

Data for the study was obtained from a sample of homemakers taken from predetermined census tracts in the City of London, Ontario. Although there was no reason to suspect that advertising credibility is influenced by sex differences it cannot be stated with certainty that no differences exist. This point will be elaborated in Chapter III.

## Organization of the Study

The dissertation is reported in eight chapters, of which this is the first.

Chapter II reviews the theoretical background of communication credibility; the role of personal factors, source credibility and message content for communication credibility are reported in three separate sections.

The research design is discussed in Chapter III. The chapter includes; a discussion of the variable selection, the statement of the hypothesis and the research methods employed to test the hypotheses. The methods section discusses the design of the questionnaire, the experimental design and the data collection procedures.

Chapter IV reports on the dependent variable definition, and certain obstacles which were encountered subsequent to the collection of data. The implications of the obstacles for analysis are discussed.

Chapter V is divided into two sections. The first section reports the preliminary findings concerning the store profiles and the social class categorization. The second section reports the general findings on the credibility of comparative price retail advertising.

The results of the hypotheses tests are presented in Chapter VI. The first three sections of the chapter report the test results for social class, store and message content respectively. The fourth section provides the results of shopping experience effect on credibility. The last section examines the reasons why consumers did not believe comparative price advertisements.

Chapter VII presents the results of the combined effects of the independent variables on credibility. The effects are shown by means of multivariate regression analysis.

Chapter VIII contains six sections. The first summarizes and discusses the empirical analysis. The second section considers the possible constraints to any extension of the research findings. The third section discusses the theoretical implications on the research. The fourth and fifth sections present a discussion of the implications for the Federal Government and for retailers. The final section explores some possibilities for further research.

# CHAPTER II

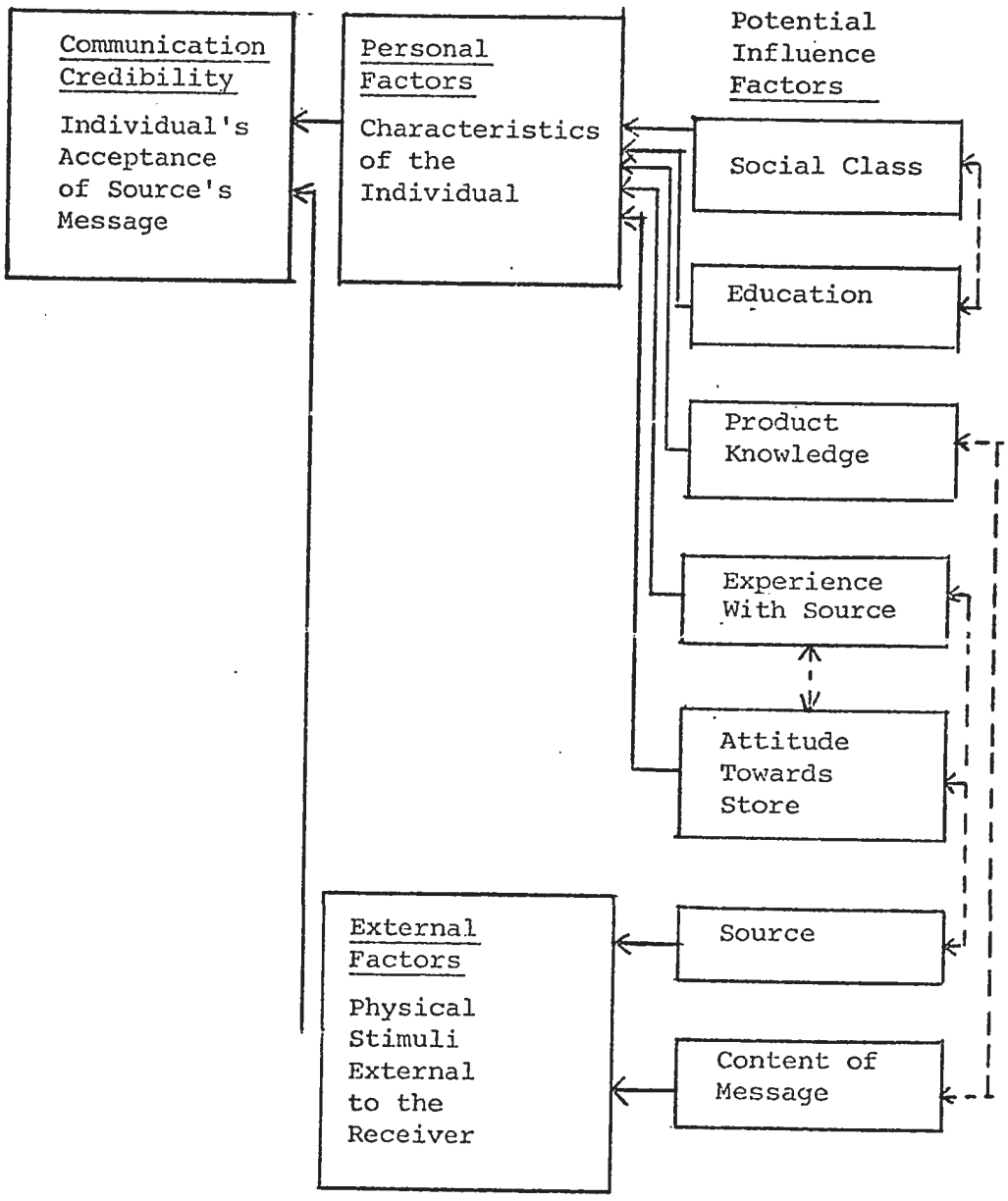
## BACKGROUND TO THE RESEARCH

This chapter reviews the literature concerning communication credibility. For the purpose of this discussion, communication credibility is defined as the receiver's acceptance of the communicator's message. The operational definition for comparative price advertising credibility is developed in Chapter Three. The objective here is to determine the potential factors which could influence the credibility of comparative price advertising. The literature pertaining to each factor is examined and the implications for this research are noted. The factors will either be incorporated in the experimental design in order to test their effect on credibility or they will be controlled as extraneous factors.

The review is divided into three sections; personal factors, source credibility and message content. Personal factors refer to characteristics of the receiver such as motivations and need-value systems. Source credibility and message content refer to aspects of the communication presented to the receiver and can be manipulated to affect communication credibility. A schematic outline of the factors examined is shown in Figure 1.

While personal and external factors are discussed separately, they do not operate independently. For example, the effect of the

FIGURE 1. Schematic outline of potential influence factors on communication credibility



source, an external factor, on communication credibility is a function of the receiver's attitude towards the source, a personal factor. Source effect, or the differential effect between two sources, is the summary of the individual receiver's attitude towards the source.

## Personal Factors

People select and interpret messages according to their interests and predispositions - not necessarily in agreement with what the communicator wants them to see and hear. It has been found people will tend to misperceive and misinterpret communications in accordance with their predispositions by evading the message or by distorting it in a favorable direction.[1, 2] This distortion - or disbelief - or willingness to accept the communicator's message - is influenced by the individual's personal factors.

This research is specifically concerned with the personal factors that might influence an individual's belief of the statements made in comparative price advertisements. The literature review indicated there were two most likely to exert the major influence: socio-economic characteristics and product price knowledge. In more general terms, product price knowledge could be viewed as the individual's experience with the situation under study.

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[1]Herbert H. Hyman and Paul B. Sheatsley, "Some Reasons Why Information Campaigns Fail", Public Opinion Quarterly, XI, (1947), 413-423.

[2]Bernard Berelson and Gary A. Steiner, Human Behavior, An Inventory of Scientific Findings, (New York: Harcourt Brace and World, Inc., 1964), p. 536.

1. Social Class and Education

Various aspects of consumer behavior including information sources, extent of search and spending patterns are related to social class.[3,4] Limited evidence suggests that credibility of advertising may also be a function of social class. Based on a number of studies by Social Research Inc., Levy concluded that upper-middle class people were more critical of advertising, suspicious of its emotional appeals, and questioning of its claims.[5] Social class differences were noted in regard to promotional advertising offering coupons and special inducements. The evidence Levy used in drawing his conclusions was mainly founded on responses to open-ended questions.[6] Because of the difficulty in interpreting such questions and, in this case, the lack of any statistical breakdowns of responses by social class, these conclusions might be viewed as overall impressions rather than proven hypotheses.

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[3]Harold H. Kassarjian and Thomas S. Robertson (eds.), Perspectives in Consumer Behavior, (Glenview: Scott, Foreman and Co., 1968), pp. 374-375.

[4]James F. Engel, David T. Kollat, and Roger D. Blackwell, Consumer Behavior, (New York: Holt, Rinehart and Winston, 1968), p. 303.

[5]Sidney J. Levy, "Social Class and Consumer Behavior", in Kassarjian, op. cit., pp. 386-397.

[6]Ira O. Glick and Sidney J. Levy, Living with Television, (Chicago: Aldine Publishing Co., 1962).

A study by Duncan and Lund, of the credibility of health information through radio advertising found that advertising claims were rated more credible by those of lower socio-economic status than by those of a higher class.[7] The generality of these conclusions is limited by the products studied (products designed to improve digestion and elimination, and the care of hair, skin and teeth), the small sample size (78 in total) and the simple measure of socio-economic status used (experts, teachers, graduate students and laymen).

While not directly related to advertising credibility, a study of viewers' reactions to television commercials found that the more educated showed a tendency toward more criticism of commercials. However, in absolute terms the differences between education levels were negligible.[8] This finding may indicate less of a willingness by more educated people to accept advertisements passively. The reaction may range from annoyance to disbelief. Since education is a major determinant of social class, it seems reasonable to assume that similar results would be obtained between social class groups.

The above studies suggest the possibility of a link between advertising credibility and social class. The nature of the relationship is not clear but there is some reason to suspect a curvilinear relationship based on other patterns of consumer behavior. In a study

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[7] G. I. Duncan and F. H. Lund, "The Validity of Health Information Gained Through Radio Advertising", Research Quarterly, XVI, (Spring, 1945), 102-105.

[8] Gary A. Steiner, "The People Look at Commercials, A Study of Audience Behavior", Journal of Business, XXXIX, (April, 1966), 272-300.

of purchase decisions, it was found the middle class consumer, measured by income or occupation, was a more deliberate shopper than either the upper or working class consumer.[9] Possibly, because of this greater deliberation, the middle class consumer may be less willing to accept the claims made by advertisers, including the quoted prices in comparative price retail advertisements.

The lack of empirical evidence and the uncertainty of the nature of the relationship, if any, between advertising credibility and social class warrants consideration. The research design should consider the possibility of a curvilinear relationship between the credibility of comparative price advertising and social class. To achieve this end, a comparison between at least three social class groups is required.

2. Product Price Knowledge

This study focuses on the credibility of comparative price retail advertisements. A personal factor which could influence credibility is the consumer's price knowledge of the products contained in the advertisements.

Product price can symbolize more than, simply, an amount of money. Consumers have used price as an indicator of quality when there is uncertainty connected with the purchase decision.[10,11] Consumer

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[9] George C. Katona and Eva Mueller, "A Study of Purchase Decisions", in L.H. Clark, (ed.), Consumer Behavior: The Dynamics of Consumer Reactions, (New York: New York University Press, 1954), Vol. 1, pp. 30-87.

[10] Harold J. Leavitt, "A Note on Some Experimental Findings about the meaning of Price", Journal of Business, XXVII, (July, 1954), 205-10.

[11] D. S. Tull, F. A. Boring, and H. H. Gonsoir, "The Relationship of Price and Computed Quality", Journal of Business, XXXVII, (April, 1964), 186-191.

knowledge of and concern with prices varies depending on the product and the consumer. There is some indication that knowledge and concern of prices is inversely related to social class: the higher the class, the less the concern or knowledge.[12,13]

Explanations for differences in knowledge of prices by product have been suggested but they have not been substantiated by empirical study. Factors which may influence knowledge of prices include: frequency of purchase, degree of differentiation among products, dimensions of product quality, and complexity of product.[14] These describe, among other things, the buying experience surrounding major appliances and household furnishings. It would also seem reasonable to argue that the consumer's knowledge of product prices would increase when he is contemplating purchase or when he has recently purchased the product.

Since price consciousness and price knowledge varies by consumer and product, differing reactions would be expected when individuals were asked questions regarding the prices of products in advertisements. For the people who think they "know" the price of a product because of a recent purchase or some other reason, there would be a greater tendency to take a position (i.e. yes, no) than to be uncertain (i.e. don't know).

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[12]Andre Gabor and Clive V.J. Granger, "On the Price Consciousness of Consumers", Journal of Applied Statistics, X, (November, 1961), 170-188.

[13]William D. Wells and Leonard A. LoScuito, "Direct Observation of Purchasing Behavior", Journal of Marketing Research, III, (August, 1966), 227-233.

[14]Richard T. Sampson, "Sense and Sensitivity in Pricing", Harvard Business Review, XXXXII, (November-December, 1964), 99-105.

This tendency should differ over products, depending on the amount of knowledge and experience consumers have of the product.

Because product price knowledge varies by product and consumer, the research should consider more than one product in the experimental design. The products should be selected, a priori, to provide different amounts of consumer experience by product. Specific information on the consumer's experience with the product should also be obtained, i.e. has the consumer recently purchased the product?

## Source Credibility

### 1. General

Source credibility refers to the perceived image of the communicator by the members of his audience. The major findings on source credibility are:

a) A communicator's intentions, expertness and trustworthiness influence the acceptance of his message.

b) The more credible the source, the more likely his conclusions will be accepted by the audience.

c) The message content is evaluated more favorably when delivered by a high, as opposed to low, credibility source.

d) If the communicator's credibility is not known, the audience tends to judge the message on the basis of content.[15]

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[15] Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, Communication and Persuasion, (Yale University Press, 1953).

Hovland, et al. concluded that source credibility is composed of two components - expertness and trustworthiness.[16] Expertness is the receiver's perception of the communicator's knowledge and experience. Trustworthiness is concerned with the communicator's aims or intent.

A subsequent investigation has provided a method for measuring the credibility of the source through the use of the semantic differential. Berlo et al. examined the criteria receivers used to evaluate message sources.[17] Subjects were asked to rate a number of different sources on semantic differential scales. Factor analysis was performed on the data and three components for the construct "dimensions for evaluating message sources" were obtained. The three dimensions were safety, qualification and dynamism. The first two are comparable to the components, trustworthiness and expertness. The third, dynamism, did not appear to be psychologically independent of the other two factors.

The research supported the previous conclusion that source credibility contains two elements - trustworthiness and expertise. In addition, the research offered a method for measuring source credibility. The application of semantic differential scales to the measurement of retailer credibility should be appropriate, provided the scales chosen tap the source credibility dimension, e.g. trustworthiness of source.

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[16] Ibid.

[17] David K. Berlo, James B. Lemert, and Robert J. Mertz, "Dimensions for Evaluating the Acceptability of Message Sources", Public Opinion Quarterly, XXXIII, (1969-70), 563-576.

Finally, one credibility study is of particular interest to this research because it employs a similar design.[18] The design varied both source and message credibility to obtain a paradigm: source credibility - high, low; message credibility - high, low. The results of the study, conducted among journalism students at four universities, were:

a) Subject agreement with the high credibility message was significantly greater than with the low credibility message.

b) Subject agreement with the low credibility message was increased by the high credibility source.

c) Subject agreement with the high credibility message was not affected by source credibility.

The explanation offered for the lack of difference in the latter finding was that the subjects, who were fairly knowledgeable with the topic, may have judged the high credibility message independent of the source on the basis of their own knowledge.

2. Retailer (Advertiser) Credibility

In exploring source effect on message acceptance, researchers have tended to use as "sources" either individuals, magazines or newspapers. They have not employed advertisers as "sources" to determine if message acceptance is influenced by the advertiser and/or the content of the message.[19] On the other side, a number of investigations have

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[18] Erwin L. Atwood, "The Effects of Incongruity Between Source and Message Credibility", Journalism Quarterly, XXXXIII, (Spring, 1966), 90-94.

[19] Karl E. Warneryd and Kjell Nowak, Mass Communication and Advertising, (Stockholm: Economic Research Institute, 1965), 2nd Edition.

been conducted on advertiser image and, in particular, retail store image. However, there does not appear to have been any attempt made to calculate the effect of store image on the credibility of the store's advertisements.

Store image research has been concerned mainly with methods of measurement and determination of image components.[20,21,22,23] The two basic measurement techniques are the open-ended question asking respondents what they like/dislike about a store and the semantic differential asking respondents to rate a store on a number of bi-polar adjectives. The advantages of each method are elaborated in Chapter III.

Store image is the "personality" the store presents to the public - a complex of meanings and relationships serving to characterize the store for people.[24] Consumers perceive stores on a number of different

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[20]Leonard L. Berry, "The Components of Department Store Image: A Theoretical and Empirical Analysis", Journal of Retailing, XXXXV, (Spring, 1969), 3-20.

[21]John H. Kunkel and Leonard L. Berry, "A Behavioral Conception of Retail Image", Journal of Marketing, XXXII, (October, 1968), 21-27.

[22]George I. Fisk, "A Conceptual Model for Studying Customer Image", Journal of Retailing, XXXVII, (Winter, 1961-62), 1-8, 54.

[23]Bruce W. Weale, "Measuring the Customer Image of a Department Store", Journal of Retailing, XXXVII, (Summer, 1961), 40-48.

[24]Leon Aron, "Does T.V. Viewing Influence Store Image and Shopping Frequency?", Journal of Retailing, XXXVII, (Fall, 1961), 1-13.

dimensions, called components, which collectively make up the store image. The number of distinct components is uncertain, as it appears to depend on the researcher's categorization method.[25,26] Consumers have different images of stores in terms of the components and the kinds of people to whom the store appeals.[27,28] Particular stores have different images for different consumer groups, related to frequency of shopping and socio-economic characteristics.[29,30]

Store advertising, a store image component, is of interest to this research because it is assumed to measure source credibility. The assumption has not been verified by previous research. This investigation differs from the typical source credibility study in that the components of source credibility, trustworthiness and expertise, need to be considered within the retailer/consumer framework. The retailer has a vested interest and presents his messages accordingly. The consumer probably recognizes this and assesses the messages in this light. Thus, the measures of source credibility in the retailer/consumer context must be modified to fit the situation. It is felt the "expertise" dimension of source credibility is not appropriate. Consumers are not

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[25]Berry, loc. cit.

[26]Fisk, loc. cit.

[27]Berry, loc. cit.

[28]Weale, loc. cit.

[29]Aron, loc. cit.

[30]Berry, loc. cit.

likely to consider retailers in this manner. Of greater importance is the "trustworthiness" dimension. Simply stated, the source credibility of retailers is measured by the consumer's evaluation of the reliability of the store's advertising.

A further difference between the typical source credibility research and this research is the method of measuring message acceptance. The typical method has been to measure the opinion change caused by various communicators. This study uses the respondent's agreement with the retailers' statements as the message acceptance measure. For example, does the respondent believe the quoted regular price for a product is the price at which the store usually sells the product?

The implications of the source credibility and store image findings for this research are as follows. The major criteria for the selection of the stores should be the expected difference in terms of source credibility. Differences in source credibility will provide the opportunity to examine source effect on the credibility of comparative price advertisements. Semantic differential scales can be employed to measure store image components, including store advertising. The results of the store image component can be employed to confirm the a priori expectation of differences in source credibility.

In addition, since store image differences may be related to shopping experience, the study should consider the effect of shopping experience on store image. This can be accomplished by comparing the store images of consumer groups with different amounts of shopping experience at the store. These consumer groups are nonshoppers, shoppers and buyers. Nonshoppers are consumers who have not shopped at the store;

shoppers are consumers who have shopped but not bought at the store; buyers are consumers who have purchased merchandise at the store.

## Content of the Message

The message content in a comparative price advertisement contains three main pieces of information - the product, the price level and the size of discount. The possible influence on credibility of different products was discussed previously. Possible price level and size of discount effects are reported here.

It has been found that consumers have ranges of acceptable prices for contemplated purchases.[31] If a product is priced above this range, consumers may reject the price because they think it is too much for that kind of product. When consumers evaluate the quoted regular prices in comparative price advertisements, they may not believe the price because it is above the acceptable range. The influence of price levels on the credibility of comparative price advertising is beyond the scope of this study. An attempt will be made, however, to control for price level effects in the experimental design.

A number of studies have examined various aspects of retail comparative price advertisements. These investigations conducted mainly for Better Business Bureaus in the United States, have looked at the extent of comparative price advertising, the average discount size

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[31] Kent B. Monroe, "The Measurement of Price Thresholds: Psychophysics and Latitudes of Acceptance", (paper read at the American Marketing Association Fall Educator's Conference, September, 1970. Boston, Massachusetts).

offered by retailers and public acceptance of comparative prices.[32,33] Findings include observations that approximately 50 percent of retailers use comparative prices, the average size of discount is about 30 percent and that size of discount influences the consumer's confidence and interest in the sale item.

These studies did not clearly determine the influence of discount size on the credibility of comparative price advertisements. The size of discount is the major selling point in comparative price advertising. It is considered, a priori, to be an important influence on the credibility of comparative price advertisements. Therefore, the research design will examine the effect of different discount sizes on credibility.

A major drawback to previous studies on comparative price advertisements has been their generality. The non-specific nature of the questions[34] may result in a socially acceptable response rather than the actual feelings or behavior of consumers. Advertisements contain a certain amount of puffery and it seems probable that many consumers discount the advertisers' claims to some extent.[35] If consumers were asked if they generally believe advertised price claims they would

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[32]G. H. Dennison, "What People Believe About Advertised Price Cuts", Published Study, (Better Business Bureau of Pittsburgh, Inc., 1953).

[33]Thomas J. Hogan, "Shoppers Can Tell a Bargain", (Unpublished Study, Duquesne University, 1960).

[34]An example is: "Does the type of merchandise advertised influence your belief in the accuracy of the claimed saving?"

[35]Richard W. Crosby, "The Consumer and his Attitudes", The Canadian Marketer, IV (Winter, 1969-70), 7-10, 15.

probably answer in the negative because they might look foolish if they said they "believed advertising". The argument is supported by the following evidence. In a nationwide survey, when asked if "most advertising is misleading and seldom gives the true facts", 50 percent of Canadians interviewed either completely or generally agreed with the statement.[36] In contrast, a television campaign conducted by the Canadian Advertising Advisory Board asked consumers to contact the Board if they encountered any offensive or misleading advertising. The free time donated to the campaign by television stations was worth an estimated $8 million but only 1237 complaints were received in the first year, of which 630 dealt with misleading advertising.[37]

To measure the credibility of comparative price advertisements, specific circumstances are required in the design of the research. Conditions should be created which represent reality as closely as possible. This research attempts to do this by using actual comparative price advertisements which had appeared in the local daily newspaper. Further procedures which were designed to elicit the respondent's true reactions to comparative price advertisements are discussed in the next chapter.

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[36]"Study of Attitudes Towards Advertising in Canada," Unpublished Research Study, (Canadian Advertising Advisory Board, 1967).

[37]Press Release, Canadian Advertising Advisory Board, (Toronto, January 15, 1971).

## Summary to Chapter II

The review indicated that a number of factors might influence the credibility of comparative price advertisements. Individual characteristics which could affect advertising credibility were socio-economic status and product price knowledge. The external factors were the retailer and the discount size offered. In addition, the consumers' shopping experience could affect their evaluation of the retailer.

While these factors might influence the credibility of comparative price advertisements, previous investigations have not directly examined the factors. The research design, presented in the following chapter, considers these factors.

# CHAPTER III

## RESEARCH DESIGN

This chapter describes the three phases of the research design: variable selection, hypotheses and research methods. The first section details the independent variables chosen and the reasons for their selection. The next section is devoted to the research hypotheses. Finally, the research methods section discusses the design of the questionnaire, the advertisements employed in the study and the data collection procedures. The development of the questions which measure the credibility of comparative price advertising is reported in the questionnaire design section.

### Variable Selection

The decision to focus on comparative price advertisements was made for two reasons. First, the Federal Government has concentrated its efforts in the field of misleading advertising to misleading price advertising and, in particular, to misleading comparative price retail advertisements. Approximately 87 percent of the 94 prosecutions for misleading price advertising were against retailers.[1]

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[1] Ronald I. Cohen, The Regulation of Misleading Advertising in Canada: A Comparative Approach, Canadian Consumer Council, Ottawa, November, 1970, p. 76 and based on personal correspondence between G. D. Orr, Director, Trade Practices Branch, Department of Consumer and Corporate Affairs, and the writer.

The second reason was to avoid the potential dangers of generality surrounding studies dealing with advertising credibility and consumer opinions on advertising. These were discussed in the previous chapter. A comparative price advertising study reduces the generality problem in that specific situations can be derived to simulate the actual environment and specific questions can be asked of the respondents about the quoted regular and sale prices in the advertisements.

The main reasons for the selection of this particular design were the implications for research provided by the background literature and an opportunity offered by the retail structure in the London area. Previous research had indicated that source credibility should be a major factor in the acceptance of the communicator's message but this had not been substantiated within the retailer/consumer framework. Considering this, the choice of stores - the sources - was important. The stores should be well-known so that consumers would have a reasonably well-defined image of them. Further, the stores should have different images, particularly on the store credibility dimension, in order to test for store effect on message acceptance.

The criteria for choice of stores were met by the selection of a local furniture and appliance store, Patton's Place, and the local branch of a national department store chain, Simpsons.

Patton's Place, the "low source credibility" store, had employed comparative price advertising extensively since its opening in 1958. A survey, reported in Table 3, showed that 70 percent of its advertisements consisted almost entirely of comparative prices. The store placed

TABLE 3. Comparison of retailers' newspaper advertising, April and November 1969

| | | |
|---|---|---|
| Number of days newspaper published | 51 | |
| | Furniture and Appliance Retailer (Patton's Place) | Department Store Retailer (Simpsons) |
| Number of days retailer advertised | 30 | 49 |
| Total advertising pages | 22-1/4 | 68-1/4[1] |
| Number of advertisements which contained at least one comparatively priced product[3] | 22[2] | 44 |
| Number of advertisements which contained 10 percent or more products which were comparatively priced | 21 | 7 |
| Percentage of total advertisements which contained 90 percent or more products which were comparatively priced | 70% | 14% |

[1]Includes one special eight page supplement.

[2]The advertisements which did not contain one comparatively priced product all implied that the product was on sale, e.g. "reduced to", "lowest price ever", "on sale at".

[3]A comparatively priced product is defined as a product having a quoted regular price and a quoted sale price.

Source: London Free Press, London, Ontario, April and November, 1969.

advertisements in approximately 60 percent of the issues published by the London Free Press. They ranged from one-quarter page to two pages with an average size of approximately three-quarters of a page. A general impression of the store conveyed by its advertisements could be capsulized in the statement: "Come on in and see us - we always have a great sale." Patton's Place handled name-brand merchandise and the manufacturer's name was normally displayed prominently in the advertisements.

In November 1968, Patton's Place was prosecuted under Section 33C of the Combines Investigation Act and found guilty of placing a misleading price advertisement in the London Free Press. The firm was fined $200 plus court costs. A report of the incident, as given in the London Free Press, is included in Appendix D. The unfavorable publicity did not appear to influence Patton's Place advertising strategy or their sales. The firm continued to employ comparative price advertisements as their main strategy. Their sales volume of approximately $3 million in 1969 was the largest yearly sales they had attained.[2]

Simpsons, the "high source credibility", was viewed as a "solid, dependable, money-back guarantee" store. Comparative price advertising was part of its advertising strategy but it was used to a far lesser extent than Patton's Place. The survey showed only 14 percent of Simpsons advertisements consisted almost entirely of comparative prices.

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[2]Speech delivered by Ron Logan, Vice-President of Patton's Place, to the London Chapter of the American Marketing Association, London, Ontario, October 26, 1970.

Simpsons placed advertisements nearly every day in the London Free Press. The store was well-known and considered, a priori, to be seen as a reliable, trustworthy advertiser.

The selection of these retailers has also provided the opportunity to explore the advantages/disadvantages of two different advertising strategies. As noted, Patton's Place was an aggressive price advertiser while Simpsons limited the use of comparative price advertisements. The research will investigate the effects of these strategies on the consumer's evaluation of the stores and his reaction to the stores' advertisements.

With the choice of stores made, the next step was to select variables to test for message content effect. Based on background literature and research objectives, the influence of different discount sizes was considered to be highly relevant. The criteria for the "size of discount" variable were that the discounts would be representative of the stores, as well as being of different sizes.

It had also been decided, based on the background review, to vary the product offered for sale. The main criterion for product selection was that consumers would, a priori, have different knowledge levels of the products.

Using these criteria as guidelines, the advertisements for Simpsons and Patton's Place which had appeared in the London Free Press were reviewed for the one year period preceding the study. A pool of advertisements which met the criteria were collected. From this collection the advertisements used in the study were selected. One basis for choice

was how well a pair of advertisements, one from each store, were matched in terms of treatment and extraneous variables. The problems associated with this matching process are discussed in detail in the section entitled "Experimental Design - Randomization and Advertisement Selection".

The eight advertisements selected, shown in Table 4 and included in Appendix B, varied with respect to store, the size of discount and the product on sale. The influence of message content would be tested by the different discount levels. The three products on sale, chesterfield and chairs, dishwashers and portable television sets, allowed for extrapolating the findings beyond one product category. Social class would be established by the sampling procedures and the socio-economic classification system. The information required to test the effect of shopping experience and product knowledge on the credibility of comparative price advertising would be obtained with the questionnaire.

Other independent variables were considered for inclusion in the study. Among these were: creative treatment, kind of sale (e.g. fire sale, warehouse sale, "going-out-of-business" sale); personality characteristics of the respondents; brand loyalty of respondents. The main reasons for their exclusion were: the other independent variables were deemed to be more important in influencing credibility; the implications for government and retailers were less critical; the added costs to the questionnaire would be prohibitive.

The study will test the major factors, as expressed in the proposition:

> "The credibility of a comparative price retail advertisement is a function of the retailer, the size of the discount, and respondent social class."

TABLE 4. Experimental variables in advertisements, by order

| | First Location Advertisement[1] | | | | | | Second Location Advertisement | | | | | | Third Location Advertisement | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Order | Ad Code | Store | Product | Regular Price ($) | Sale Price ($) | Size of Discount (%) | Ad Code | Store | Product | Regular Price ($) | Sale Price ($) | Size of Discount (%) | Ad Code | Store | Product | Regular Price ($) | Sale Price ($) | Size of Discount (%) |
| 1 | $C_1$ | Patton's Place | Chesterfield and Chair | 370.00 | 185.00 | 50 | $F_2$ | Simpsons | Dishwasher | 339.98 | 204.99 | 40 | $D_3$ | Simpsons | Chesterfield and Chair | 299.98 | 149.88 | 50 |
| 2 | $D_1$ | Simpsons | " | 299.98 | 149.88 | 50 | $G_2$ | Patton's Place | Portable Television | 189.95 | 168.88 | 11 | $C_3$ | Patton's Place | " | 370.00 | 185.00 | 50 |
| 3 | $C_1$ | Patton's Place | " | 370.00 | 185.00 | 50 | $H_2$ | Simpsons | " | 189.98 | 169.00 | 11 | $B_3$ | Simpsons | " | 399.95 | 298.00 | 25 |
| 4 | $B_1$ | Simpsons | " | 399.95 | 298.00 | 25 | $E_2$ | Patton's Place | Dishwasher | 519.95 | 289.95 | 44 | $C_3$ | Patton's Place | " | 370.00 | 185.00 | 50 |
| 5 | $A_1$ | Patton's Place | " | 399.95 | 297.95 | 25 | $F_2$ | Simpsons | " | 339.98 | 204.99 | 40 | $B_3$ | Simpsons | " | 399.95 | 298.00 | 25 |
| 6 | $B_1$ | Simpsons | " | 399.95 | 298.00 | 25 | $G_2$ | Patton's Place | Portable Television | 189.95 | 168.88 | 11 | $A_3$ | Patton's Place | " | 399.95 | 297.95 | 25 |
| 7 | $A_1$ | Patton's Place | " | 399.95 | 297.95 | 25 | $H_2$ | Simpsons | " | 189.98 | 169.00 | 11 | $D_3$ | Simpsons | " | 299.98 | 149.88 | 50 |
| 8 | $D_1$ | Simpsons | " | 299.98 | 149.88 | 50 | $E_2$ | Patton's Place | Dishwasher | 519.95 | 289.95 | 44 | $A_3$ | Patton's Place | " | 399.95 | 297.95 | 25 |

[1]The advertisement seen first by a respondent.

NOTE: A respondent would view the three advertisements contained in one of the orders.

## Hypotheses

H1: The credibility of the discount offered in a comparative price advertisement is positively related to retailer credibility.

The operational definitions for this hypothesis and the two following are detailed in the "Research Methods" section and Chapter IV.

H2: The credibility of the discount offered in a comparative price advertisement varies with the social class of the respondents.

H3: The credibility of the discount offered in a comparative price advertisement is inversely related to the size of the discount in the advertisement.

## Research Methods

### 1. Questionnaire Design

The main problem in developing the questionnaire was deciding how to measure the credibility of the discount offered.[3] The problem can be divided into two parts related to measuring the regular price credibility and the sale price credibility.

Regular price credibility refers to belief that the regular price given in a comparative price advertisement is the usual selling price for that product in the market area. For a discount to be credible, the quoted regular price must be seen to be the usual or normal price. If the quoted regular price is not regarded as the usual price, the discount is not credible, i.e. respondents think the product can normally be purchased for less than the quoted regular price.

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[3]This research measures the credibility of the discount offered in comparative price advertisements. For discussion purposes, "discount offered" will be assumed and the dependent variable will be referred to as "credibility of comparative price advertisements" or simply "credibility".

Three questions were employed to measure selected aspects of the regular price. Two of the questions related to regular price credibility:

1) The regular price is shown as DOLLAR AMOUNT. Do you think this is the price STORE has been selling this PRODUCT for during the last few days?

YES_____ NO_____ DON'T KNOW_____

2) Do you think this "regular price" of DOLLAR AMOUNT is what people would have to pay at other stores around London for this PRODUCT at the present time?

YES_____ NO_____ DON'T KNOW_____

Before the questioning began, the respondents were asked to imagine the advertisements had appeared in "tonight's" London Free Press. Thus, "the last few days" refers to the period prior to the sale.

The intent of the first question was to ascertain whether respondents thought the quoted regular price was the price at which a store usually sold the product. The question is store-specific: is the store's quoted regular price believed by the consumer? The purpose of the second question was to determine whether respondents thought the quoted regular price was the usual selling price at other stores in London. Taken together, the two questions determined whether a respondent thought the advertising store and/or other stores in the market area usually sold the product at the stated regular price.

The credibility of the sale price was concerned with whether the consumer thought the sale price offered a saving. The advertiser implicitly claimed, in his advertisement, that he was offering a saving that couldn't be matched. The magnitude of the saving could be inter-

preted to range from: the sale price was regarded as a "fair bargain" - to the "lowest price the product ever sold for". The question decided on was:

Do you think the sale price of DOLLAR AMOUNT is the lowest price at which you could buy this PRODUCT in London?

YES_____ NO_____ DON'T KNOW_____

The question was considered a conservative measure of the saving offered. That is, a "yes" response indicated the sale price was considered the best prevailing price for the product. The response could be used as a surrogate measure for action. If consumers thought the sale price was the lowest in town, they would be more likely to purchase the product at that store. This measure will be referred to as the sale price measure.

Respondents expressing disbelief in the quoted prices, regular or sale, were asked to provide reasons for their response.[4] They were also asked what they thought the regular (or sale) price was.[5] These questions were included to contribute to the understanding of the nature and degree of consumer disbelief.

A second consideration in developing the questionnaire was store image measurement. The two stores were chosen on a priori knowledge to

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[4]The responses to the "why" questions will be referred to as the "disbelief reasons" responses.

[5]These responses will be referred to as the perceived prices. That is, these are the prices which the respondents thought the product usually sold for or was on sale for.

have different images but this supposition required verification. Eight semantic differential scales were selected to measure store image. The eight scales were concerned with sales personnel (three), advertising (two), level of prices (one), product quality (one) and store reputation among friends (one). Five scales had been previously tested by other researchers[6], and the remaining three were developed for this study. The scales were pre-tested and no interviewee problems were encountered in the use of the scale or in understanding the bi-polar adjectives.[7] In order to reduce possible order effects in administration, the scales and their positive/negative positions were randomly sequenced.

As mentioned previously, there is some disagreement about the most appropriate method for measuring store image. The crux of the disagreement is whether semantic differential scales are relevant for all respondents regardless of shopping experience at the store.

This issue was met by determining the respondents' shopping experience at the store. They were asked if they had ever shopped/bought furniture and/or large appliances at either store. Respondents could then be classified as: nonshoppers - those who had not shopped at the store; shoppers - those who had shopped but not bought at the store; buyers - those who had bought at the store.

Other information obtained from the questionnaire included socio-economic data, product purchase information and attitudes towards shopping.

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[6]Robert F. Kelly and Ronald Stephenson, "The Semantic Differential: An Information Source for Designing Retail Patronage Appeals", Journal of Marketing, XXXI, (October, 1967), 43-47.

[7]One scale, low pressure salespeople - high pressure salespeople, was removed from the analysis for reasons presented in the next chapter.

The questionnaire is presented in full in Appendix A.

The questionnaire was pre-tested with 50 respondents selected to provide a broad socio-economic spectrum. Some minor modifications resulted. The respondents did not appear to experience serious difficulties in understanding and answering the questions.

The research was concerned with consumer reaction to comparative price advertisements. With respect to the advertisements, the investigation did not determine the prices the products usually sold for or whether the sale price was the best deal in town. Aside from being extremely difficult to ascertain, the determination of "actual" prices was not important. For this research, the interest was in exploring how consumers evaluated the information contained in comparative price advertisements, not in whether their evaluation may have coincided with the "actual" situation. Consumers' purchase decisions are based on their assessments of information.

## 2. Experimental Design - Randomization and Advertisement Selection

The objective in any experiment is to structure the design so the researcher is able to determine the effect on the system of the variables under study. Two basic design features are necessary to accomplish this objective.

The first is the randomization procedure. Random assignment of respondents to treatments is needed in order to avoid bias in favor of some of the variables being evaluated, and as a requirement for the subsequent use of statistical tests upon the data.[8] A key feature of this

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[8] Seymour Banks, Experimentation in Marketing, (New York: McGraw-Hill Book Company, 1965), p. 5.

design was the randomization procedure.

The advertisements employed in the study were selectively arranged in eight orders as shown in Table 4. A respondent saw one order containing three advertisements. The orders can be regarded as the treatments. The orders were randomly assigned to respondents by providing the interviewers with a package of questionnaires in which the orders were randomly sequenced. The first respondent questioned by the interviewer received the order sequenced first. The second respondent received the order sequenced second, and so on. This process resulted in the random assignment of treatments to respondents.

The advertisements differed with respect to three variables - the retailer, discount size and product on sale. The advertisements are presented in Appendix B. A particular advertisement specified the three variables. Comparison of the subjects' responses between different advertisements would reveal the effect of the store and discount size. For example, store effect could be determined by a comparison of responses between Advertisements $A_1$ and $B_1$. These advertisements were similar in every respect, with the exception of the store. Because a randomization procedure was employed, these comparisons can be made.

The second feature necessary to accomplish the experiment objectives is to establish conditions such that all factors, experimental or extraneous, are controlled and/or known. Experimental factors are those variables whose effects are to be measured and compared. Extraneous factors are all other factors and conditions which could affect the response of the subjects to the experimental factors.

Difficulties are encountered in establishing these conditions, particularly with social science experiments, because the extraneous factors cannot always be controlled or because these factors are not always known. Even when they are known, there is a decision required as to how they should be treated because a trade-off is involved between internal and external validity. Internal validity is concerned with the issue of whether the specific treatments have produced the effect indicated by the measuring devices. External validity deals with the problem of projecting the results from the experimental setting to the world.[9]

This research encountered the trade-off between internal and external validity in the selection of the advertisements. To achieve high internal validity, the advertisements should be identical in every respect except for the experimental factor. For example, if the effect of discount size was to be measured, the advertisements should differ only with respect to that factor. The cost of this kind of experimental structure is in external validity attained. If identical advertisements were used, the experimental situation would have been one of asking consumers if they believed the quoted prices in artificial comparative price advertisements. This was considered an unrealistic situation. Extrapolation of any results to larger populations would be very hazardous because of this experimental situation.

The problem was handled by selecting advertisements which were closely, but not identically, matched for the experimental and extraneous factors. Respondents were placed in a situation which had and could

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[9]Ibid., p. 26.

occur in the real world. Further, an attempt was made to identify the possible biases in results due to differences in the factors.

The experimental design contained four pairs of matched advertisements. That is, each pair was matched for all factors with the exception of the store. A comparison of the experimental and extraneous factors for each pair is shown in Table 5. Possible biases due to differences in the pairs are noted below. These biases will be considered in the analysis and interpretation of the results.

In regard to the experimental factors, the only difference is in size of discount between Advertisements E - F. Advertisement E has a 44 percent discount while Advertisement F has a 40 percent discount, a difference of 4 percentage points. The background research, and from that the hypothesis, states that credibility and size of discount are inversely related. This would suggest the number of disbelief responses should be greater for Advertisement E. Considering the magnitude for the difference in the two discount sizes, the bias should be relatively small.

Differences are present in all four extraneous factors. It was felt the brand factor difference should not influence the respondents as all three brands - Westinghouse, General Electric and R.C.A. - are produced by well-known national manufacturers.

The regular price factor differs for two pairs of advertisements (C - D and E - F). This difference should tend to bias the responses against the higher price. Consumers would be more likely to disbelieve the credibility of the higher regular price, other things being equal. Previous research has indicated that consumers have ranges of acceptable

TABLE 5. Comparison of experimental and extraneous factors for the matched advertisements

| Factors | ADVERTISEMENTS COMPARED: Chesterfield & Chair - 25% off Patton's Place (A) vs. Simpsons (B) | | Chesterfield & Chair - 50% off Patton's Place (C) vs. Simpsons (D) | | Dishwasher-40% off Patton's Place (E) vs. Simpsons (F) | | Portable Television Set - 11% off Patton's Place (G) vs. Simpsons (H) | |
|---|---|---|---|---|---|---|---|---|
| | Difference | Extent of Difference | Difference | Extent of Difference | Difference | Extent of Difference | Difference | Extent of Difference |
| **Experimental** | | | | | | | | |
| -Size of Discount | No | - | No | - | Yes | 44% (E) - 40% (F) | No | - |
| -Product | No | - | No | - | No | - | No | - |
| **Extraneous** | | | | | | | | |
| -Brand | No | - | No | - | Yes | Westinghouse (E) - General Electric (F) | Yes | RCA (G) - General Electric (H) |
| -Regular Price | No | - | Yes | $370 (C) - $300 (D) | Yes | $520 (E) - $340 (F) | No | - |
| -Sale Price | No | - | Yes | $185 (C) - $150 (D) | Yes | $290 (E) - $205 (F) | No | - |
| -Kind of Sale | Yes | Inventory Sale (A) - Home Sale (B) | Yes | One-half Price Sale (C) - Warehouse Sale (D) | Yes | Clean House Sale (E) - Warehouse Sale (F) | Yes | Pre-Inventory Sale (G) - Warehouse Sale (H) |

prices for contemplated purchases.[10] Quoted prices outside this range may be disbelieved because the respondent thinks the stated price is too high.

The sale price factor, like the regular price factor, differs for two pairs of advertisements (C - D and E - F). The differences may have an influence on the sale price measure. For a reason similar to the acceptable price range, consumers may be more likely to think a lower quoted sale price is the best deal in town.

The kind of sale factor is different for all four pairs of advertisements. Any response bias would be related to the overall credibility of the sale, i.e. the reasons for having the sale. There was no reason to suspect that any one of the sales might have a higher credibility than the others. The reasons for these sales (warehouse, inventory, etc.) are the reasons given by many retailers for sales. None of them would be classed as atypical which could create a higher perceived credibility for the sale.

In summary, it was judged that differences in the matched pairs of advertisements might cause the following biases:

a) The difference in the discount size between Advertisements E and F (44 percent off versus 40 percent off) might lower the regular price credibility for Advertisement E.

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[10] Kent B. Monroe, "The Measurement of Price Thresholds: Psychophysics and Latitudes of Acceptance", (paper read at the American Marketing Association Fall Educator's Conference, September, 1970, Boston, Massachusetts).

b) The difference in the quoted regular price level between Advertisements C and D and Advertisements E and F might lower the regular price credibility for Advertisements C and E.

c) The difference in the quoted sale price for the same two pairs of advertisements might increase the sale price belief for Advertisements C and E.

3. Data Collection

The data was collected by means of a field survey which was necessary because of the length of the questionnaire (an estimated 15 minutes to complete), the need to show the advertisements to the respondent and the interviewer explanation required for certain questions. A professional research house was engaged to conduct the fieldwork.

The sampling frame consisted of the female head of a household who resided within specific London City census tracts. The decision to use only homemakers was made for three reasons. On average, wives participate in the buying decision for major appliances as much as their husbands.[11,12] Secondly, by using only women, results of the study could be analyzed without controlling for sex differences. Finally, housewives are easier to contact, which reduces the data collection costs.

The potential respondents were screened to eliminate anyone who was employed, or who had a family member employed, at a department or

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[11]James F. Engel, David T. Kollat, and Roger D. Blackwell, Consumer Behavior, (New York: Holt, Rinehart and Winston, 1968), pp. 403, 437, 472.

[12]Elizabeth H. Wolgast, "Do Husbands or Wives Make Purchasing Decisions?", Journal of Marketing, XXIII, (October, 1958), 151-158.

furniture store in London. The census tracts were selected on the basis of average income as reported in the Dominion Bureau of Statistics 1961 Census and personal knowledge of the city to provide two different geographic areas which reflected two social class groups - working class and middle-upper class. Within each area, a random block sample was selected. A description of selection procedures for the blocks and the households at the block locations is provided in Appendix C. A total of 332 completed interviews were obtained from the field survey.

The survey was conducted during the last three weeks of August and first two weeks of September, 1969. The data collected by five interviewers and the distribution of contacts of four of the interviewers is shown in Table 6. The research firm misplaced the records of the fifth interviewer but it is likely that addition of these records would not significantly change the distribution of the contacts. The high proportion of "not-at-homes" was accounted for, in part, by the fact the study took place during summer vacation period. For economy reasons, no call-backs were made for the "not-at-homes". The possible bias of obtaining a disproportionate number of non-working homemakers was considered and interviews were conducted during the evening hours to counteract this possible bias. The completion rate of 31 percent was considered typical for a "one-call" study.[13]

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[13]Based on personal correspondence between A. B. Blankenship, Vice-President, Canadian Facts Co. Limited, and the writer.

TABLE 6. Distribution of interviewer contacts[1]

| Status of Contact | Distribution of Contacts | |
|---|---|---|
| | Number | % |
| No one at home | 271 | 36 |
| No homemaker at home | 118 | 15 |
| Refusal | 129 | 17 |
| Disqualified | 5 | 1 |
| Completions | 238 | 31 |
| TOTAL | 761 | 100 |

[1]Four out of five interviewers reporting.

# CHAPTER IV

## DEPENDENT VARIABLE DEFINITION AND OBSTACLES

The first part of this chapter is concerned with the dependent variable definition. The second part reports on the obstacles encountered with the data which required modifications in the proposed analytic procedures originally planned.

### Dependent Variable Definition

This section reports on: the nature of the data, referring to the measurement level attained in the questionnaire; the appropriate analytic techniques, directly related to the measurement level attained; definition of the dependent variable, based on the foregoing.

#### 1. Nature of the Data

The measurement level of the questions employed to determine credibility is reported. In addition, the possible interpretations of an "uncertain" response are discussed.

The dependent variable questions were structured so that dichotomous responses were obtained. For example, Question 1 asks:

> "The regular price is shown as DOLLAR AMOUNT. Do you think this is the price STORE has been selling the PRODUCT for during the last few days?"
>
> YES_____ NO_____ DON'T KNOW_____

Logically, it was reasonable to assume an ordinal level of measurement was attained. An affirmative response indicated a greater degree of belief in the message credibility than did an uncertain (don't know) response. An uncertain response indicated a greater degree of belief in the message than a negative response.

Previous research on persuasive communications also supports the assumption that message credibility consists of at least three levels - belief, disbelief and uncertainty. After reviewing a considerable amount of research on communications and attitude change, Maloney concluded that consumer response to advertisements is not limited to the mutually exclusive alternatives of belief or disbelief.[1] There is a middle ground which represents a state of "non-belief" described as ambivalence or uncertainty. The uncertain state could be caused by a number of factors, but the major factor is probably lack of experience with the situation. The consumer is unwilling to commit himself to the position of either belief or disbelief until he obtains additional information.

Both logic and previous research indicate that advertising credibility can be measured at the ordinal level. Statistical techniques which can be applied to ordinal scale data are reported in the next section. The remainder of this section examines the nature of an uncertain (don't know) response.

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[1]John C. Maloney, "Curiosity versus Disbelief in Advertising", Journal of Advertising Research, II, (June, 1962), 2-8.

The main reason for an uncertain response to the dependent variable questions was probably lack of familiarity with one or more of the components contained in the advertisements. The two obvious components were the store and product on sale. If the consumer had not shopped at the store, then her evaluation of the store's message must be made on information obtained from other than actual experience. The consumer may have decided she did not have sufficient information to decide whether the store had sold the product for the quoted regular price before the sale. Similarly, if she was not familiar with the product on sale, she might have been hesitant to respond that the store usually had sold the product for that price. The distribution of uncertain responses will be examined to determine if shopping experience or product experience affected the number of uncertain responses.

2. Appropriate Analytic Techniques

The appropriate analytic techniques for ordinal scale data, with some exceptions, are non-parametric statistics. Parametric statistics require variables measured on at least an interval scale,[2] a requirement which was not met by this data. The two non-parametric tests employed in the analysis are chi-square and differences in proportions. The data met the assumption that the observed scores are drawn from an underlying continuous distribution, and "ranking statistics"

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[2]Sidney Siegal, Nonparametric Statistics, (New York: McGraw-Hill Company, 1963), p. 26.

(e.g. the Spearman $r_s$) could also be applied to the data.[3]

An exception to the rule concerning ordinal scale data is a special case of regression analysis using dummy variables.[4] The dependent variable is dichotomous and dummy variables are used to represent the independent, or prediction variables. The one difficulty with this technique, where the dependent variable is dichotomous, is that the assumption of homoscedastic disturbances cannot be made.[5] Heteroscedasticity does not bias parameter estimates but reduces the efficiency of estimation.[6] Thus, results obtained with regression analysis using a dichotomous dependent variable are unbiased and the statistical tests will be conservative. Formulation and interpretation of the regression models is reported in Chapter VII.

3. Variable Definition

Four questions were included to probe the dependent variable; three involving the quoted regular price (Questions 1, 2, 3) and one involving the quoted sale price (Question 4).[7] A number of possible response combinations could be derived to define the dependent variable(s).

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[3]Ibid., p. 25.

[4]J. Johnston, Econometric Methods, (New York, McGraw-Hill Company, 1963), pp. 221-228.

[5]Ibid., p. 227.

[6]Ibid., pp. 207-211.

[7]The questions are presented in Figure 2.

The combinations could be obtained by aggregating the responses to more than one question then categorizing them in different ways. One example is provided in Figure 2. As this was an important step in the analysis, a detailed explanation of variable definition follows.

The first consideration was to determine if the questions could logically be tied together. As noted previously, the combination of Questions 1 and 2 covered the major aspects of the regular price credibility. If a consumer did not think the store usually sold the product for the quoted regular price (Question 1) and/or she did not think people would usually pay the regular price at other stores around London for the product (Question 2), then the quoted regular price was not credible. The consumer thought the product could usually be purchased either at that store or other stores for less than the quoted regular price.

The basic difference between the questions was that the first was a measure of the consumer's acceptance of the statement from a specific store regarding the regular price. The second was a more general measure which included the consumer's perception of the general price level of the specific store relative to other stores. Depending on what effect was to be measured, there is some rationale for analyzing the responses to the questions separately as well as analyzing the combined responses. For example, if the objective was to determine the source effect on message acceptance, then the store-specific measure (Question 1) was most appropriate.

Question 2 incorporated the additional dimension of the store's price level. The intent of the question was to determine if the quoted

FIGURE 2. Dependent variable questions and possible response categorization of Question 1-2.

Questions

1. The regular price is shown as $ DOLLAR AMOUNT. Do you think this is the price STORE has been selling this PRODUCT for during the last few days?

   YES_____ NO_____ DON'T KNOW_____

2. Do you think this "regular price" of $ DOLLAR AMOUNT is what people would have to pay at other stores around London for this PRODUCT at the present time?

   YES_____ NO_____ DON'T KNOW_____

3. After the sale is over, what is the price you think STORE will sell the PRODUCT for? _____

4. Do you think the sale price of $ DOLLAR AMOUNT is the lowest price at which you could buy this PRODUCT in London?

   YES_____ NO_____ DON'T KNOW_____

Possible response categorization of Question 1-2

| Categorization | Response to Question 1 | Response to Question 2 |
|---|---|---|
| Believer | Yes | Yes |
| | Yes | D.K. |
| | D.K. | Yes |
| Uncertain | D.K. | D.K. |
| Nonbeliever | No | Yes |
| | Yes | No |
| | No | D.K. |
| | D.K. | No |
| | No | No |

regular price was the normal selling price at other stores in town. A consumer may have believed a store sold the product for the quoted regular price (Question 1) but may also have thought the store was high-priced relative to other stores. Question 2 provided the opportunity for the consumer to reject the quoted regular price if she thought the store was high priced. By combining the responses to Questions 1 and 2, an overall measure of regular price credibility was obtained, which then determined the proportion of consumers who believed the quoted regular price in a comparative price advertisement.

The third question differed from the first two with respect to time dimension. Its purpose was to ascertain if consumers thought the store would return the product to the regular price after the sale was over. This question opened the possibility of conditions changing because of the sale. For example, in some of the advertisements, the product was "one-of-a-kind" and the consumer might have thought it would be sold during the sale. Because of the change in time dimension and the possible condition change, this question was not considered to evoke similar responses to the first two questions.

The fourth question, labelled the sale price measure, asked consumers if they thought the sale price was the best price in town. The possibility existed that the question might be combined with one or more of the other questions to obtain a general credibility measure. The objective of including this question in the study, however, was to determine the impact of comparative price advertisements. Response to the question could be used as a surrogate measure for action. In addition, the relationship of responses between the sale price measure

and regular price credibility measures could be explored. For example, does belief of the quoted regular price lead to a greater belief of the sale price?

Before data analysis, the responses were checked to ensure that a negative response to each of the first two questions meant the subject thought the usual selling price was lower than the regular price. The possibility existed that the subject would think the store, or other stores, usually sold the product at a price that was higher than the stated regular price. This possibility, which was most likely to occur with respect to Question 2, could be checked by reference to the open-ended data obtained for each question. The check was made and 14 subjects were found who thought the store (one) or other stores (13) usually sold the product for higher than the quoted regular price. These negative responses were changed to affirmative responses because the subjects believed the usual selling price was at least as high as the stated regular price.

It is also appropriate to mention at this time that the believability of the sale price was checked in the pretest questionnaire. It was found almost all of the pretest respondents thought if they were the first person to attempt to purchase the product at the sale price, they could, in fact, purchase the product. Because the sale price as quoted was generally believed, the measure was removed from the final questionnaire.

Response patterns to various combinations of the four questions were examined to ascertain if the questions formed a scale and the extent to which they were related. In the first test, scalogram analysis was

applied to the four questions. The aim was to determine whether a set of respondents and a set of items (questions) can be logically ordered together on a single scale.[8] The Guttman Scalogram Model was used to determine the scalability of the responses. Advertisements A, B, C and D were tested separately and all responses to these advertisements (approximately 160 responses per question per advertisement) were employed. The results indicated that respondents and questions did not form a scale. The differences between the four advertisements in terms of the most acquiescent question and the actual responses to the questions indicated a single scale could not be formed. The question receiving the largest number of identical responses changed between advertisements and the most acquiescent response changed. In one case, the most acquiescent response changed from affirmative to negative for the same question between two different advertisements.

Further, the coefficients of reproducibility, the primary criterion of scalability, were either marginally acceptable or unacceptable. A coefficient of .90 or greater has been established as a rule of thumb for scalability.[9] The four coefficients calculated for Advertisements A, B, C and D were .82, .88, .91 and .89 respectively. These results supported the contention that the four questions did not form a scale.

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[8]Warren S. Torgenson, Theory and Methods of Scaling, (New York: John Wiley and Sons, 1958), pp. 307ff.

[9]Ibid., pp. 318-325.

The second test was the calculation of the contingency coefficient C for the possible combinations of the four questions. The contingency coefficient, based on the $\chi^2$, is a measure of the extent of association or relation between two sets of attributes.[10] As shown in Table 7, two tests were conducted based on a 3X3 contingency table and a 2X2 contingency table. The second test was included because a large part of the $\chi^2$ of the 3X3 contingency table was due to the uncertain responses. Portions of the later analysis will omit the uncertain responses so it was desirable to examine the belief-nonbelief responses. The second test removed the effects of the uncertain responses by using only the affirmative and negative responses. The data was obtained from the first advertisement seen by respondents ($A_1$, $B_1$, $C_1$, $D_1$) because these advertisements were most similar in content. Test One results showed that all question combinations were significantly related; Test Two gave similar results. The only difference was that the Question 3-4 combination was not significant for Test Two.

Considering Test Two, the Question 1-2 combination had the greatest degree of association which was consistent with prior expectations. Consumers who believed (disbelieved) a store usually sold a product for the quoted regular price also tended to believe (disbelieve) other stores usually sold the product for the same price. To a lesser extent, there was a significant relationship between the third question

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[10]Siegal, op. cit., pp. 196ff.

TABLE 7. $\chi^2$ and contingency coefficient C for all combinations of dependent variable questions[1]

Test 1

| | Response | | |
|---|---|---|---|
| Response | Yes Belief | Don't Know Uncertain | No Nonbelief |
| Yes - Belief | x | x | x |
| Don't Know - Uncertain | x | x | x |
| No - Nonbelief | x | x | x |

Results of Test 1

| Question Combination | $\chi^2$ | Level of Significance | Contingency Coefficient - C [2] |
|---|---|---|---|
| 1 - 2 | 169.3 | .001 | .58 |
| 1 - 3 | 68.1 | .001 | .41 |
| 1 - 4 | 33.2 | .001 | .30 |
| 2 - 3 | 44.8 | .001 | .34 |
| 2 - 4 | 61.5 | .001 | .40 |
| 3 - 4 | 19.7 | .001 | .24 |

Test 2

| | Response | |
|---|---|---|
| Response | Yes Belief | No Disbelief |
| Yes - Belief | x | x |
| No - Nonbelief | x | x |

Results of Test 2

| Question Combination | $\chi^2$ | Level of Significance | Contingency Coefficient - C [2] |
|---|---|---|---|
| 1 - 2 | 80.5 | .001 | .50 |
| 1 - 3 | 51.7 | .001 | .41 |
| 1 - 4 | 4.8 | .05 | .14 |
| 2 - 3 | 24.9 | .001 | .31 |
| 2 - 4 | 8.8 | .01 | .19 |
| 3 - 4 | .6 | - | .05 |

[1] Data Base - all responses to the four advertisements ($A_1$, $B_1$, $C_1$, $D_1$,) in the first location
- N = 332 for Test 1: N = 332 less all uncertain responses for Test 2

[2] The maximum value that C can attain: for a 2X2 table is .707
: for a 3X3 table is .816

and each of the first two. Again, this was consistent with prior expectations but because of the different nature of the questions a lower degree of association had been anticipated.

The degree of association between Question 2-4 was higher than between Question 1-4. Consumers who believed (disbelieved) the quoted regular price is the usual price in town were more likely to have believed (disbelieved) the sale price was the best deal in town. This relationship was greater than was the one where consumers who believed (disbelieved) the store's statement regarding the regular price also believed (disbelieved) the sale price was the best deal in town. These results suggested the price level dimension was tapped by Questions 2 and 4.

The evidence of scalogram analysis indicated a scale could not be established from the responses to the four questions. The correlation analysis showed the responses between questions were dependent, particularly for the Question 1-2 combination, thus providing some justification for combining the responses into one measure. While recognizing this, the questions will be handled separately for the hypotheses tests.

This approach was considered to provide the clearest picture of the experimental effects on the responses. To elaborate, the possibility existed that if the responses to the first two questions were combined, there would be no differences between stores. The reason for the null difference could be due to the counteracting effect of the two questions between stores.

Question 1 could elicit a high degree of disbelief if the store

was a "low source credibility" store. Question 2 could elicit a high degree of disbelief if the store was a "high-priced store". By combining the responses, the net result might indicate no difference between them on the separate questions.

The drawback to analyzing the responses separately was that they were not independent. Similar results for the three questions might be expected because the questions were dependent and, to some extent, measuring the same thing. The implications of this point will be discussed during the analysis. Where appropriate, certain combinations of responses will be presented.

The terms to be used for the dependent variable questions are as follows. Store reference measure refers to the responses to Question 1. General reference measure refers to the responses to Question 2. Regular price credibility refers to the combined responses to Question 1 and 2. Sale price measure refers to the responses to Question 4.

The potential understanding of advertising credibility to be gained from analyzing Question 3 was not deemed sufficient to include it in further analysis. The question did not address credibility per se but rather whether the consumer thought the product would be on sale for a limited time. Upon consideration, it was felt this information would not contribute appreciably to the investigation. Therefore, Question 3 was dropped from the analysis.

## Obstacles

Certain problems, or obstacles, were encountered after the data was collected. These, and the resulting modifications in the analysis,

are reported. Some validity issues, related to the obstacles, are also discussed.

1. Fatigue Effect

The advertisements tested were arranged in eight orders, with each order containing three advertisements. The first and third locations in each order were selected rotations of Advertisements A, B, C and D. One objective of this design was to test for store effect across orders. This was to be done by comparing the responses to the first and third advertisements for respondents who had seen both. The advantage was that the effect of different stimuli, e.g. different sources, on a given individual could be measured.

Unfortunately, this approach had to be discarded because the structure of the questionnaire influenced responses to the third advertisement. If a consumer gave an affirmative or uncertain response to the first, second or fourth question, she was not asked further questions regarding her response. If she answered any of these questions negatively, she was asked two additional questions. This created the condition of having an "easy route" through the questions (by answering "yes" or "don't know") and a "hard route" (by answering "no"). In a sense, the respondents were penalized for negative answers. This resulted in fatigue and order effects. The former was the increased tendency to give an affirmative answer to the questions concerning the third location advertisement because the respondents had learned that negative responses resulted in further questioning. Order effect was a subset of fatigue effect. It was an increased tendency to give an affirmative answer if the preceding advertisement contained a large size of discount.

The first and third locations contained the same four advertisements. If there was no fatigue effect, the distribution of responses would be similar for the two locations. The results, shown in Table 8 and Table 9, indicated there was a fatigue effect. The proportion of nonbelief responses was significantly different for the first question for the same advertisements in the first and third location. The disbelief proportions for the first and third location were .52 and .35 respectively. The responses were not significantly different for either the second or fourth question although the differences were in the predicted direction. The respondents apparently learned there was an easy route through the questions which was based on their responses. This learning caused an upward bias in favor of non-negative responses to the questions on the third location advertisements.

The responses to the second and fourth question were not significantly different. The explanation for this may be accounted for, in part, by the fact that there was a lower proportion of nonbelief responses to these two questions relative to the first question. Considering the first location, there were 171 nonbelief responses to the first question versus 136 and 96 to the second and fourth questions respectively. This meant the first question had the greatest potential for downward movement although on a percentage basis, the responses to the first question still exhibited the greatest change.

A second explanation may lie in the nature of the questions. When a respondent gave a negative answer to the first question, she was then asked, as with the other questions, "why". This meant the respondent was asked her reason for not believing the store's statement regarding the

TABLE 8. Percentage distribution of responses by dependent variable question, first and third location advertisements

Store reference measure

| Response | ADVERTISEMENT $A_1$ | $A_3$ | $B_1$ | $B_3$ | $C_1$ | $C_3$ | $D_1$ | $D_3$ |
|---|---|---|---|---|---|---|---|---|
| Belief | 29 | 50 | 50 | 65 | 22 | 31 | 41 | 60 |
| Uncertain | 17 | 15 | 12 | 12 | 8 | 13 | 16 | 14 |
| Nonbelief | 54 | 35 | 38 | 23 | 70 | 56 | 43 | 26 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 83 | 80 | 84 | 82 | 84 | 85 | 81 | 85 |

General reference measure

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Belief | 36 | 48 | 37 | 49 | 29 | 31 | 43 | 45 |
| Uncertain | 30 | 22 | 20 | 21 | 24 | 28 | 17 | 15 |
| Nonbelief | 34 | 30 | 43 | 30 | 47 | 41 | 40 | 40 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Sale price measure

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Belief | 52 | 53 | 41 | 46 | 76 | 81 | 73 | 80 |
| Uncertain | 28 | 20 | 21 | 26 | 12 | 12 | 15 | 14 |
| Nonbelief | 20 | 27 | 38 | 28 | 12 | 7 | 12 | 6 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

TABLE 9. Fatigue effect - comparison of the number of responses by advertisement location

Store reference measure

| Response | ADVERTISEMENT $A_1 - A_3$ | $B_1 - B_3$ | $C_1 - C_3$ | $D_1 - D_3$ | Total |
|---|---|---|---|---|---|
| Belief | -16[1] | -11 | - 8 | -18 | -53 |
| Uncertain | + 2 | Ø | - 4 | + 1 | - 1 |
| Nonbelief | +17 | +13 | +11 | +13 | +54 |
| TOTAL | + 3 | + 2 | - 1 | - 4 | Ø |

General reference measure

| | | | | | |
|---|---|---|---|---|---|
| Belief | - 8 | - 9 | - 2 | + 3 | -22 |
| Uncertain | + 7 | Ø | - 4 | + 1 | + 4 |
| Nonbelief | + 4 | +11 | + 5 | - 2 | +18 |
| TOTAL | + 3 | + 2 | - 1 | - 4 | Ø |

Sale price measure

| | | | | | |
|---|---|---|---|---|---|
| Belief | + 1 | - 4 | - 5 | - 9 | -17 |
| Uncertain | + 7 | - 3 | Ø | Ø | + 4 |
| Nonbelief | - 5 | + 9 | + 4 | + 5 | +13 |
| TOTAL | + 3 | + 2 | - 1 | - 4 | Ø |

Proportion test - difference in proportion of nonbelief responses - first location versus third location

| Measure | Z | Level of Significance |
|---|---|---|
| Store reference | 3.02 | .05 |
| General reference | 1.04 | - |
| Sale price | .91 | - |

[1]The number of respondents who answered "yes" to Question 1 for Advertisement A in the first location ($A_1$) minus the number of respondents who answered "yes" to Question 1 for Advertisement A in the third location ($A_3$) equals -16.

[2]Two-tailed test for differences in proportions (N = 166).

quoted price. The disbelief reasons for the other questions did not have to reflect a distrust of a store. For example, the reason for disbelief could be because other stores usually sold the product at a lower price. A respondent may be more reluctant to discredit a store (e.g. "That store is dishonest") than to state other reasons for disbelief (e.g. "The price is too high"). This could result in a greater willingness to avoid the situation where a store's statements have to be judged. When being questioned on the third advertisement, respondents knew they could avoid the situation by giving an affirmative response to the first question.

Based on the above findings, the third advertisement was removed from further analysis because the responses were caused, in part, by interviewee fatigue. This effect distorted the results by creating an upward bias in the number of affirmative responses to the questions. It was felt the extent of the distortion, particularly for the first question, was serious enough to warrant the exclusion of these findings.

Order effect was a subset of fatigue effect. It was hypothesized that the size of discount would influence credibility, that is, the larger the discount size the higher the proportion of disbelief responses. If there was a fatigue effect, did the discount size of the preceding advertisement increase the likelihood of fatigue occurring on the following advertisement? As shown in Table 10, for each of the four advertisements appearing in the second location (Advertisements $E_2$, $F_2$, $G_2$, $H_2$), a greater proportion of negative responses followed a small discount size compared with a large discount size. While the differences were not statistically significant, the fact that all four were in the predicted

TABLE 10. Order effect - comparison of responses to second location advertisement

| Advertisement | Order | Size of Preceding Discount | Prediction | Result | Result as Predicted | Z | Level of Significance |
|---|---|---|---|---|---|---|---|
| $E_2$ | 4<br>8 | Small<br>Large | $P(N_2\|\text{Small}) > P(N_2\|\text{Large})$[1] | 31/43>27/39<br>.721>.692 | Yes | .28 | - |
| $F_2$ | 1<br>5 | Large<br>Small | $P(N_2\|\text{Large}) < P(N_2\|\text{Small})$ | 19/43<22/41<br>.442<.537 | Yes | .87 | - |
| $G_2$ | 2<br>6 | Large<br>Small | $P(N_2\|\text{Large}) < P(N_2\|\text{Small})$ | 16/42<21/41<br>.381<.512 | Yes | 1.20 | - |
| $H_2$ | 3<br>7 | Large<br>Small | $P(N_2\|\text{Large}) < P(N_2\|\text{Small})$ | 14/41<17/42<br>.341<.405 | Yes | .60 | - |

[1]The probability of a negative response to either Question 1, 2 or 4, is lower for an advertisement which follows one which contains a large discount versus a small discount.

NOTE: The advertisements preceding the second advertisements are from the same store. For example, the two $E_2$ advertisements are preceded by Simpsons advertisements.

direction is a strong indication that order effect occurred with the second advertisement.

The responses to the second advertisement will be included in further analysis. Although an order effect was present, it did not cause significant differences in the responses and the effect was "balanced" between advertisements. That is, each of the four advertisements in the second location were preceded by one large and one small discount size. Comparisons between these advertisements is valid because the same condition, in terms of discount size, preceded the advertisement.

One other check was made on the responses to the first, second and fourth questions. Because the responses were of the dichotomous variety, the possibility of the "yeasaying-naysaying" phenomena existed.[11] The response style, yeasaying, influences an individual's answers to questions (a tendency to say yes more easily than others) and may not reflect his true feelings on a subject. Fifteen respondents, out of the total 332, answered "yes" to the three questions for the three advertisements they viewed. The questionnaires of these respondents were examined but there was no concrete evidence of interviewer or interviewee error. While these respondents were suspect, there was no substantial basis for excluding them.

2. Store Image Obstacles

The image of each store was measured with eight semantic differential scales. These seven-point scales provide measures assumed

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[11] William D. Wells, "The Influence of Yeasaying Response Style", Journal of Advertising Research, I, (June, 1961), 1-12.

to have interval qualities and parametric statistics were used to analyze them.[12]

Correlation coefficients were calculated, by store, for the 28 pairs of scales (See Table 11). The overview comments on this table are reported in the next chapter.

An unexpected finding was the lack of dependence between the "low pressure salespeople" scale and either of the two other "salespeople" scales. The three scales were evaluations of sales personnel and it was expected they would be dependent to some degree. The "low pressure" salespeople scale could be unique or a poor measure because of possible ambiguities connected with the scale.

The evidence suggests the "low pressure" scale was a poor measure. First, the other two "salespeople" scales were dependent. Secondly, the responses to the "liked/disliked about the store" question revealed the most frequent dislike of Simpsons was that it was hard to get a sales clerk (Table 12). Given this fact, it seemed feasible that the respondents did not use the scale in the intended manner. Instead, they reversed the scale so the "low pressure" or favorable end of the scale was being used for an unfavorable evaluation. This reversal of polarity was reflected in the comment of one respondent: "You bet they (Simpsons) are low pressure - you can never find a clerk!"

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[12]Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning, (Urbane: University of Illinois Free Press, 1957).

TABLE 11. Correlation coefficients - semantic differential scales, by store

SIMPSONS

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Courteous salespeople | - | .55 | .07 | .25 | .28 | .21 | .36 | .42 |
| 2. Helpful salespeople | | - | .03 | .37 | .39 | .30 | .23 | .30 |
| 3. Low pressure salespeople | | | - | .04 | .01 | .09 | .12 | .10 |
| 4. Believable advertising | | | | - | .71 | .40 | .15 | .30 |
| 5. Reliable advertising | | | | | - | .43 | .15 | .36 |
| 6. Competitive prices | | | | | | - | .16 | .38 |
| 7. High quality products | | | | | | | - | .39 |
| 8. Well-liked by your friends | | | | | | | | - |

PATTON'S PLACE

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Courteous salespeople | - | .69 | .06 | .25 | .26 | .48 | .45 | .28 |
| 2. Helpful salespeople | | - | .08 | .25 | .34 | .37 | .38 | .30 |
| 3. Low pressure salespeople | | | - | .24 | .20 | .02 | .05 | .06 |
| 4. Believable advertising | | | | - | .76 | .33 | .32 | .32 |
| 5. Reliable advertising | | | | | - | .29 | .32 | .39 |
| 6. Competitive prices | | | | | | - | .43 | .22 |
| 7. High quality products | | | | | | | - | .39 |
| 8. Well-liked by your friends | | | | | | | | - |

N = 332

TABLE 12. "Liked most/least about the store" response distribution

| | Simpsons | Patton's Place |
|---|---|---|
| **LIKED MOST** | | |
| Sales personnel | | |
| -courteous/helpful/friendly | 51 | 53 |
| Merchandise suitability | | |
| -good selection | 33 | 40 |
| -good quality products | 11 | 13 |
| Post transaction satisfaction | | |
| -money back guarantee/reputable store | 37 | 1 |
| -good service after purchase | 4 | 1 |
| Store atmosphere | | |
| -good layout | 6 | 10 |
| -good displays | 5 | 11 |
| -pleasant surroundings | 11 | 7 |
| Value for price | | |
| -good bargain | 1 | 13 |
| Store services | | |
| -air conditioned/packing/delivery, etc. | 9 | 5 |
| Location | | |
| -good location | 7 | 6 |
| Nothing | 33 | 38 |
| No answer/unclassifiable | 1 | 2 |
| | 209 | 194 |
| **LIKED LEAST** | | |
| Sales personnel | | |
| -hard to get a clerk | 31 | 2 |
| -unhelpful/unfriendly/discourteous | 12 | 2 |
| -pushy salespeople | 1 | 29 |
| Merchandise suitability | | |
| -not enough stock/variety | 9 | 4 |
| -low quality products | 3 | 4 |
| Post transaction satisfaction | | |
| -poor service after payment | 3 | 5 |
| -bad experience | 7 | 5 |
| Store atmosphere | | |
| -crowded/too big/etc. | 13 | 3 |
| -poor layout | 5 | 1 |
| Value for price | | |
| -prices too high | 19 | 15 |
| Store services | | |
| -poor parking/slow elevators, etc. | 14 | 4 |
| Location | | |
| -poor location | - | 6 |
| Advertising | | |
| -can't believe their ads, dishonest | 3 | 9 |
| Nothing | 84 | 104 |
| Unclassifiable | 5 | 1 |
| | 209 | 194 |

The "low pressure salespeople" scale was omitted from further analysis and the store image analysis was conducted on the seven remaining scales.

As noted previously, there is some disagreement as to how store image should be measured.[13] The crux of the disagreement is: are semantic differential scales relevant for all respondents, regardless of shopping experience? In particular, for people who have not shopped at a store, does forced choice result in responses of no meaningful content because such people have no image of the store? This problem was examined by obtaining the distribution of responses by scale and by shopping experience. Shopping experience was defined as never shopped, shopped but not bought, or had bought.

The semantic differential did not have a category labelled "no store image". The available option was a neutral check point. This middle location could be used by respondents who have no image of the store or who have a neutral image. If the proportion of respondents scoring the mid-point on the scale was significantly greater for the non-shoppers versus the shoppers and/or buyers it would strongly suggest the nonshoppers were using the mid-point because they had no image of the store.

As shown in Table 13, the proportion of mid-point responses was greater for the nonshoppers than either of the two other groups in all cases. The proportions for the nonshoppers at Patton's Place was the

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[13]John H. Kunkel and Leonard L. Berry, "A Behavioral Conception of Retail Image", Journal of Marketing, XXXII, (October, 1968), 21-27.

TABLE 13. Proportions of "Neither one nor the other" responses to total responses by shopping experience, by store

| Semantic Differential Scale | Simpsons Shopping Experience | | | |
|---|---|---|---|---|
| | Nonshoppers | Shoppers | Buyers | Total |
| Courteous salespeople | 19.5[1] | 12.2 | 7.1 | 13.0 |
| Helpful salespeople | 25.2 | 4.9 | 10.2 | 14.5 |
| Believable advertising | 27.6 | 14.6 | 14.2 | 19.3 |
| Reliable advertising | 20.3 | 9.8 | 10.2 | 13.9 |
| Competitive prices | 25.2 | 17.1 | 6.3 | 16.0 |
| High quality products | 21.1 | 17.1 | 18.1 | 19.0 |
| Well-liked by your friends | 31.7 | 20.7 | 18.1 | 23.8 |
| N = | 123 | 82 | 127 | 332 |

| Semantic Differential Scale | Patton's Place Shopping Experience | | | |
|---|---|---|---|---|
| | Nonshoppers | Shoppers | Buyers | Total |
| Courteous salespeople | 81.2 | 22.5 | 4.9 | 40.4 |
| Helpful salespeople | 78.3 | 22.5 | 5.7 | 39.5 |
| Believable advertising | 58.7 | 15.5 | 14.6 | 33.1 |
| Reliable advertising | 59.4 | 23.9 | 17.1 | 36.1 |
| Competitive prices | 51.4 | 8.5 | 4.9 | 25.0 |
| High quality products | 53.6 | 28.2 | 13.0 | 33.1 |
| Well-liked by your friends | 69.6 | 35.2 | 40.7 | 51.5 |
| N = | 138 | 71 | 123 | 332 |

[1]To be read: 19.5 percent of the Simpsons nonshoppers (123 in total) responded "Neither One Nor the Other" to the "Courteous Salespeople" scale.

highest, ranging from 51 percent to 81 percent on the seven scales. The differences between the two stores in the proportions for nonshoppers can be explained by the categorization method employed. The question asked was "Have you ever shopped for furniture or large appliances at Simpsons/Patton's Place?" Simpsons was a large department store which carried a wide range of merchandise, besides furniture and large appliances. Patton's Place had a more limited product range; it carried only furniture, appliances and related merchandise. It was quite likely many of the respondents categorized as nonshoppers at Simpsons had shopped for products other than furniture or large appliances. It was far less likely that nonshoppers at Patton's Place had shopped for other products. Therefore, many of the "nonshoppers" at Simpsons would evaluate the semantic scales because they had shopped for other products. The higher proportion of neutral responses for Patton's Place undoubtedly reflected the limited product range.

The high proportion of mid-point responses for the nonshoppers relative to the shoppers and buyers was a strong indication these respondents did not have an image of the store. This was particularly evident for Patton's Place where the proportion of mid-point responses for nonshoppers is over 50 percent for all the scales. Because of the strong likelihood that the nonshoppers had no image of the store, this group was excluded from further analysis of the store image data. The analysis was conducted with the respondents who had shopped or bought at the store.

An interesting sidelight of the above analysis was the varying proportion of mid-point responses between the scales for nonshoppers at Patton's Place. The two "salespeople" scales showed the highest propor-

tion of neutral responses which was what would be expected since these evaluations would probably require a visit to the store. The scales which received the lowest proportions of neutral responses concerned price competitiveness and product quality. Patton's Place was an extensive price advertiser and the store handled brand name products. It appeared that a "low price - high product quality" image had been established with their advertising for the nonshoppers.[14] The varying proportions of neutral responses on the scales also indicated the respondents discriminated between the scales. The respondents showed a greater propensity to evaluate the store on those scales which did not require them to have shopped at the store - e.g. the evaluation could be made on the images obtained from the store's advertising.

3. Respondent Interest

A final obstacle concerned the problem of whether the subjects' answers to the dependent variable questions reflected their actual beliefs. That is, what if the subjects were not interested in purchasing any of the advertised products and therefore had a low interest in participating in the survey? Because of low interest, their responses may not have reflected their actual beliefs but instead reflected some superficial feelings.

Only limited data was available to address this problem. The first test was a comparison between those consumers who had purchased one of the advertised products within the last year (purchasers) against

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[14]The store profiles, which substantiate the "low price - high product quality" image are presented in Tables 15 and 16.

those who had not purchased (nonpurchasers). It was assumed the purchasers would be interested in the advertisements because of the recentness of purchase. By comparing the responses of the two groups to the dependent variable questions, any differences due to product interest or experience could be noted.

Table 14 reports the response distributions for the consumers who had/had not purchased the advertised products within the last year. Sample size problems limited any tests to the chesterfield and chair product only. Among the purchasers, there was a greater proportion of believers for all three measures when compared with the nonpurchasers. One comparison, on the sale price measure, was significantly different at the .10 level. The main cause of this difference was the uncertain responses. When they were removed from the test, the calculated chi-squared (1.76) was not statistically significant. ($\alpha$ = .20). It was concluded that recentness of product purchase did not influence the credibility of comparative price advertisements. This evidence also suggested that level of interest on the part of the subjects was not a problem.

Two of the three measures had a higher proportion of nonpurchasers giving an uncertain response which was consistent with prior expectations. It appeared that lack of product knowledge, because of nonrecentness of purchase, increased the likelihood of an uncertain response.

The pretest questionnaire provided the second piece of evidence supporting the contention that the subjects responded to the questions in the intended manner. The writer conducted the pretest (sample size = 50) and found, in general, the subjects were willing to accept the scenario

TABLE 14. Response distributions to dependent variable questions by recentness of product purchase

| Response | Purchasers[1] | % | Nonpurchasers[2] | % |
|---|---|---|---|---|
| **Store reference measure** | Advertisements $A_1$ to $D_1$ - Chesterfield and Chair | | | |
| Belief | 15 | 39 | 102 | 35 |
| Uncertain | 6 | 15 | 38 | 13 |
| Nonbelief | 18 | 46 | 153 | 52 |
| TOTAL | 39 | 100 | 293 | 100 |
| **General reference measure** | | | | |
| Belief | 17 | 44 | 103 | 35 |
| Uncertain | 5 | 12 | 71 | 24 |
| Nonbelief | 17 | 44 | 119 | 41 |
| TOTAL | 39 | 100 | 293 | 100 |
| **Sale price measure** | | | | |
| Belief | 30 | 77 | 170 | 58 |
| Uncertain | 3 | 8 | 60 | 20 |
| Nonbelief | 6 | 15 | 63 | 22 |
| TOTAL | 39 | 100 | 293 | 100 |

$\chi^2$ Test - Purchasers versus Nonpurchasers

| Measure | $\chi^2$ | Level of Significance (df=2) |
|---|---|---|
| Store reference | .53 | - |
| General reference | 2.71 | - |
| Sale price | 5.63 | .10 |

[1]Purchasers - have purchased the product within the last year.

[2]Nonpurchasers - have not purchased the product within the last year.

(imagining that the advertisements would appear in this evening's London Free Press) and to evaluate the advertisements in that light. Based on this experience, in the writer's judgment the average subject interest level in evaluating the advertisements was sufficiently high to provide responses reflecting actual beliefs.

# CHAPTER V

## PRELIMINARY AND GENERAL FINDINGS

The findings reported in this chapter are divided into two sections. The preliminary findings on the store profiles and the social class categorization provide the necessary background for the store and social class hypothesis tests. The second section reports on the response distribution to the dependent variable questions for the eight advertisements employed in the study. In addition, the perceived discount sizes for those consumers who disbelieved the quoted prices are reported. These results provide a general picture of the extent of disbelief.

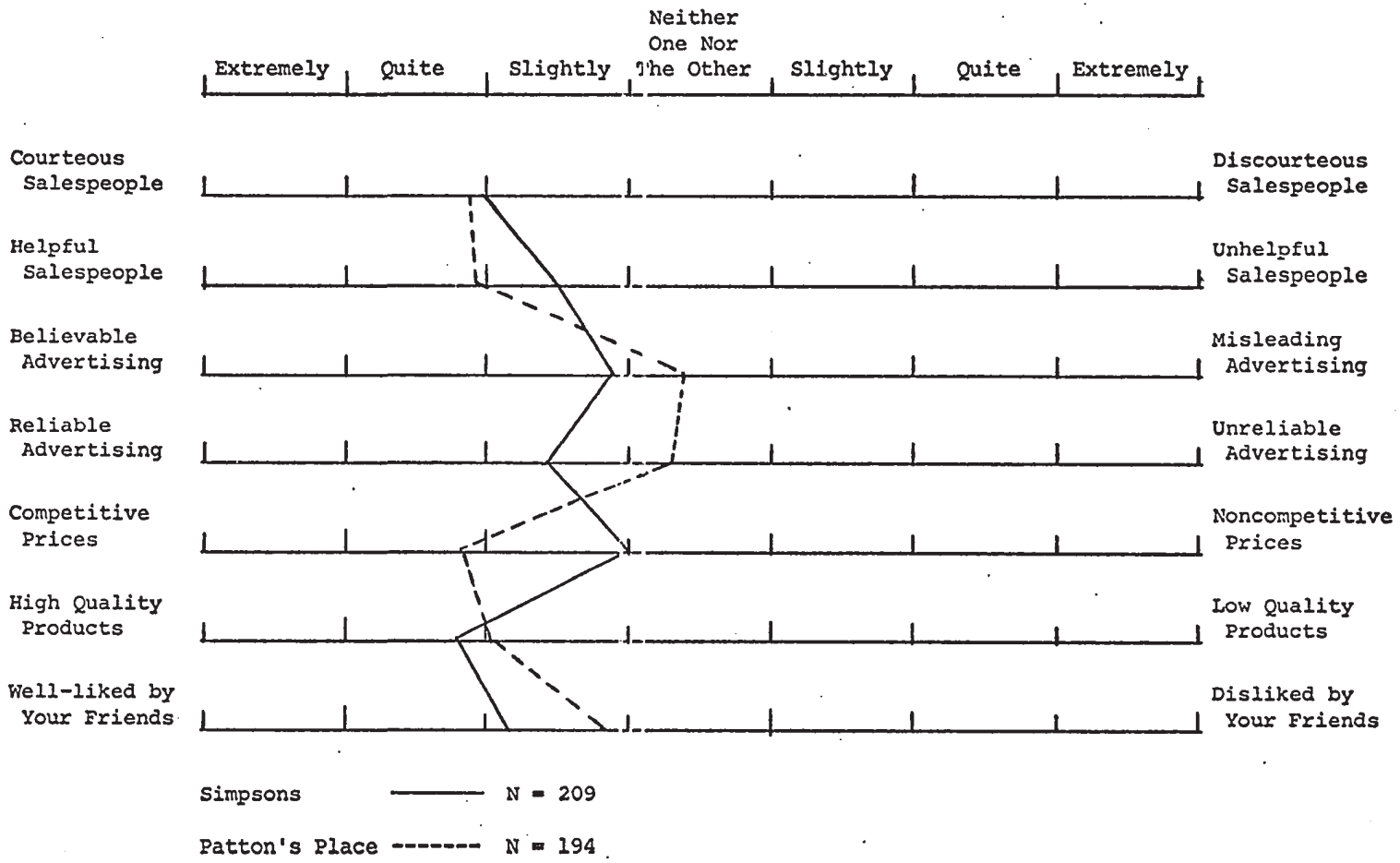
## Preliminary Findings

### 1. Store Profiles

The correlation coefficients for the semantic scales were shown in Table 11 in the previous chapter. By store, the correlation coefficients revealed that the two "salespeople" scales (believable and helpful) were significantly correlated ($\alpha = .005$) and that the two advertising scales were significantly correlated ($\alpha = .005$). The "competitive prices" scale was also significantly correlated to both advertising scales for both stores ($\alpha = .005$) although the correlation was higher for Simpsons than for Patton's Place.

The store profiles confirm the major prediction concerning the images. As shown in Table 15, Simpsons advertising was seen as more

TABLE 15. Store profile - Simpsons and Patton's Place - respondents who shopped or bought at the store



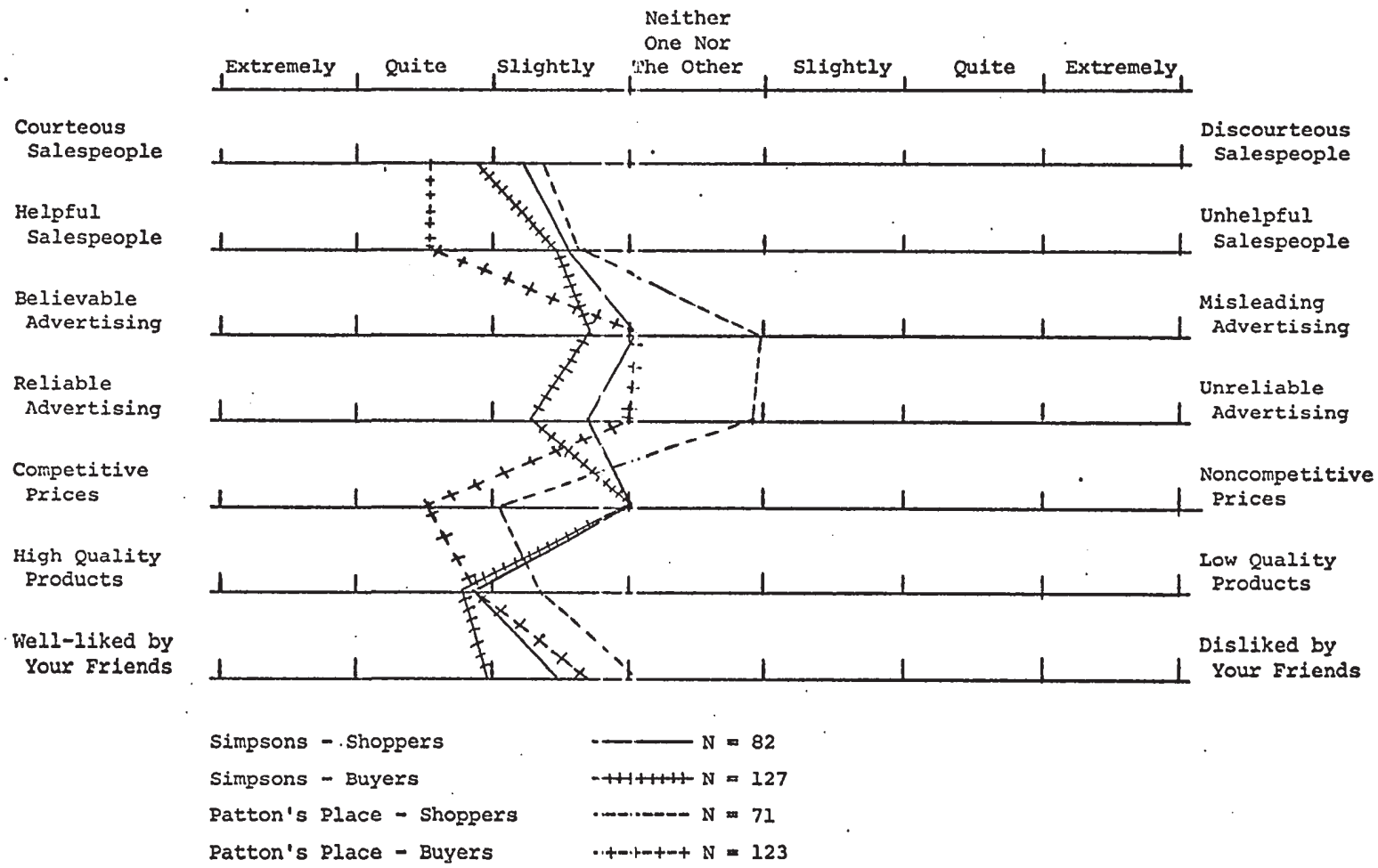
reliable and more believable than that of Patton's Place. The mean scores were significantly different between the two stores for the reliable advertising scale ($\alpha$ = .025) and the believable advertising scale ($\alpha$ = .10). Patton's Place received approximately the same average score for both advertising scales but Simpsons was rated less favorably on the "believable" scale versus the "reliable" scale.

Patton's Place obtained a more favorable image than Simpsons on the two "salespeople" scales. A major part of Patton's Place marketing strategy was its personnel training procedures and policies. These included extensive product knowledge training, commissioned sales and unique hiring practices (the salesmen hired are usually over 40 years of age). Simpsons personnel procedures are, no doubt, well intended but they appear to be less effective. To reiterate a previous point, the most frequent dislike of Simpsons mentioned by respondents was that it was hard to get a clerk. The net result was that Patton's Place received a more favorable evaluation of its salespeople than did Simpsons.

The greatest significant difference between the two stores was on the competitive price rating ($\alpha$ = .01) in which Patton's Place was seen as having more competitive prices. This difference undoubtedly reflected the different selling strategies. Simpsons was an old-line department store located in downtown London, offering a number of services. Patton's Place was a relatively new retailer located outside the core area and offering fewer services. In addition, Patton's Place emphasized savings in the majority of its advertisements.

A comparison of store profiles was also made between shoppers and buyers at the stores. Table 16 shows buyers had a more favorable image

TABLE 16. Store profile - Simpsons and Patton's Place - comparison of shoppers and buyers



of the store than did the shoppers. In relative terms, Patton's Place shoppers were far more negative in their evaluations than were those at Simpsons. The average difference on the seven scales between shoppers and buyers at Simpsons was .27; the corresponding difference for Patton's Place was .70. The difference was not significant for Simpsons ($t = 1.30$, $p < .20$, two-tailed) but it was for Patton's Place ($t = 3.33$, $p < .01$, two-tailed). Patton's Place shoppers apparently had unsatisfactory experiences at the store. Their evaluation of the store's advertising was very unfavorable relative to the three other groups. They may have visited the store because of the advertisements and, on finding their expectations were not met, developed a negative evaluation of the store.

In summary. Simpsons was seen as a more reliable, believable advertiser than Patton's Place, but also as a higher priced store. Patton's Place was seen to have more helpful, courteous salespeople. The stores received a similar favorable evaluation on product quality. When shoppers and buyers were compared for each store, the buyers rated the store more favorably than the shoppers on all scales. Patton's Place shoppers had the lowest image of the store, particularly where the reliability and believability of the store's advertising were concerned. Because of the differences in store image between shoppers and buyers, a comparison of the store reference responses of these two groups will be made. The expectation, based on the store images, is that shoppers will have a greater tendency than buyers to disbelieve the stores' statements regarding the quoted regular price. The findings will be reported in the next chapter.

The fact that shopping experience may influence credibility does not affect analysis of the total sample. The sampling design included randomization procedures and this resulted in the sample being balanced between stores for nonshoppers, shoppers and buyers for each advertisement. This should be expected because of the randomization procedures which determined the particular set of advertisements (order) that a respondent viewed. The penalty associated with analyzing the total sample is one of noise due to the different respondent classes, i.e. shopping experience.

2. Social Class Categorization

The respondents were categorized by two methods so comparisons between methods could be made. This was done to increase the precision of the classification procedure. Four pieces of information were used with both methods; education of wife, education of husband, total annual income and occupation of husband. The occupation of husband score, ranging from one to eight, was based on the National Opinion Research Centre scale of occupational prestige ratings.[1]

The categorization steps involved with the two methods are outlined in Table 17. With the first, a standardized score for each respondent was calculated and the respondent categorized into one of the three social class groups - working, middle, middle-upper - depending on her score. The second method employed sequential categorization rules in classifying the respondents. Where respondents were classified into two social class groups as a result of the sequential rules, conflicts

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[1] Robert W. Hodge, Paul M. Siegal, and Peter H. Rossi, "Occupational Prestige in the United States: 1925-1963", in Reinhard Bendix and Seymour M. Lipset (eds.), Class, Status, and Power, (New York: The Free Press, 1966), Second Edition, pp. 324-5.

TABLE 17. Method of social class classification

1. Information Used

| | Range of Scores |
|---|---|
| Education of wife | 1 - 6 |
| Education of husband | 1 - 6 |
| Occupation of husband | 1 - 8 |
| Yearly income | 1 - 6 |

2. Method 1

a) Mean score for each respondent calculated - equal weight for each socio-economic measure.

b) When socio-economic measures were missing for a respondent - mean score on available measures calculated.

c) Mean cutoff scores established - respondents classified accordingly.

d) Resulting class sizes - working = 136, middle = 101, middle-upper = 95.

3. Method 2

a) Sequential decision rules used to classify respondents

| Rule | Measure | Category | Classification |
|---|---|---|---|
| i | Income | over $15000 | upper |
| ii | Income | under $4000 | lower |
| iii | Education-wife | college or over | upper |
| iv | Education-wife | primary | lower |
| v | Education-husband | college or over | upper |
| vi | Education-husband | primary | lower |
| vii | Occupation-husband | less than 4[1] | upper |
| viii | Occupation-husband | more than 6 | lower |
| ix | Income | $6-9000 | middle |
| x | Education-wife | high school | middle |
| xi | Education-husband | high school | middle |
| xii | Occupation-husband | 5 | middle |

[1]Modified NORC scale

b) Conflicts resulting from respondent being classified in two social groups (e.g. working and middle) resolved by judgment.

c) Resulting class sizes - working = 136, middle = 109, middle-upper = 87.

4. Misclassifications between the two methods were 34 or approximately 10 percent of the sample.

were resolved by judgment. In comparing the two methods, 34 respondents or approximately 10 percent of the total were misclassified. The misclassifications are reported in Table 18. Since the total was low, it was felt either method would be satisfactory. The misclassifications were examined and all appeared to be on the borderline between two classes. The first categorization method was used because no arbitrary judgments were involved with it. The number of respondents in the working, middle and middle-upper class groups was 136, 101 and 95 respectively.

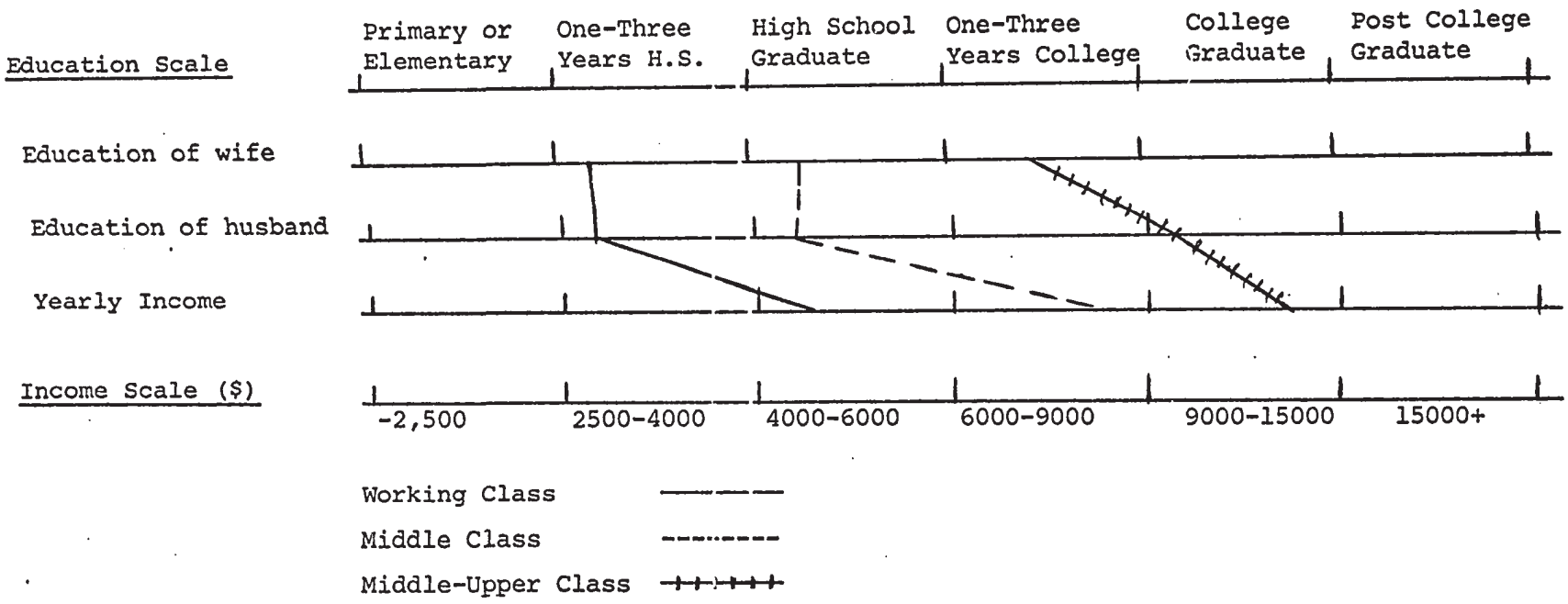
TABLE 18. Misclassifications by the two methods of social class classification

| | |
|---|---|
| - Number of respondents classified as working class by Method 1 and middle class by Method 2 | 8 |
| - Number of respondents classified as working class by Method 2 and middle class by Method 1 | 8 |
| - Number of respondents classified as middle class by Method 1 and middle-upper class by Method 2 | 5 |
| - Number of respondents classified as middle class by Method 2 and middle-upper class by Method 1 | 13 |
| TOTAL | 34 |

These social class groups encompass the entire range of the social class spectrum. Their labelling as working, middle and middle-upper, is somewhat artificial when compared to established social class identifications, i.e. Warner's.[2] The profiles, shown in Table 19, provide the mean

[2] W. Lloyd Warner, J. O. Low, Paul S. Lunt, and Leo Srole, Yankee City, (New Haven: Yale University Press, 1963).

TABLE 19. Mean scores on education and income, by social class



scores by group on the socio-economic variables and define the labels used for this study. The working class respondents had an average of less than one to three years of high school. Their average annual income was slightly lower than the $4,000 to $6,000 range. The middle class respondents had slightly more than one to three years' high school and an average annual income within the $6,000 to $9,000 range. The middle-upper class respondent had, on average, attended college for one to three years and her husband's education was somewhat higher. The average yearly income for the middle-upper class family was within the $9,000 to $15,000 range.

A better verbal definition of each group would be; working class - the unskilled and skilled labor groups (e.g. assembly line workers, barbers, painters); middle class - the salaried group (e.g. policemen, bookkeepers); middle-upper - the white-collared, professional (e.g. banker, public school teacher).

If the research findings are to be extended to larger populations, it is necessary to determine how representative the survey sample is of larger populations. To the extent that the sample reflects larger populations on the socio-economic characteristics, the survey findings on the credibility of comparative price advertisements can be projected to the larger populations.

Current education statistics for the populations of Ontario or Canada were not available. Relatively current (1965) household income statistics were, and comparisons were made between the income distribution of the sample and the population of Ontario and Canada. The comparisons were distorted somewhat by the differences in time (sample =

1969, Ontario and Canada = 1965), the possible overstatement of annual incomes by the sample respondents, and the sampling frame (sample = urban, Ontario and Canada = urban and rural). The net effect of the distortions was difficult to predict but it was probably in the direction of a downward bias for the Ontario and Canada data. That is, if precise income distributions could be obtained, the net change in the distributions (sample versus Ontario and Canada) would favor the Ontario and Canada data.

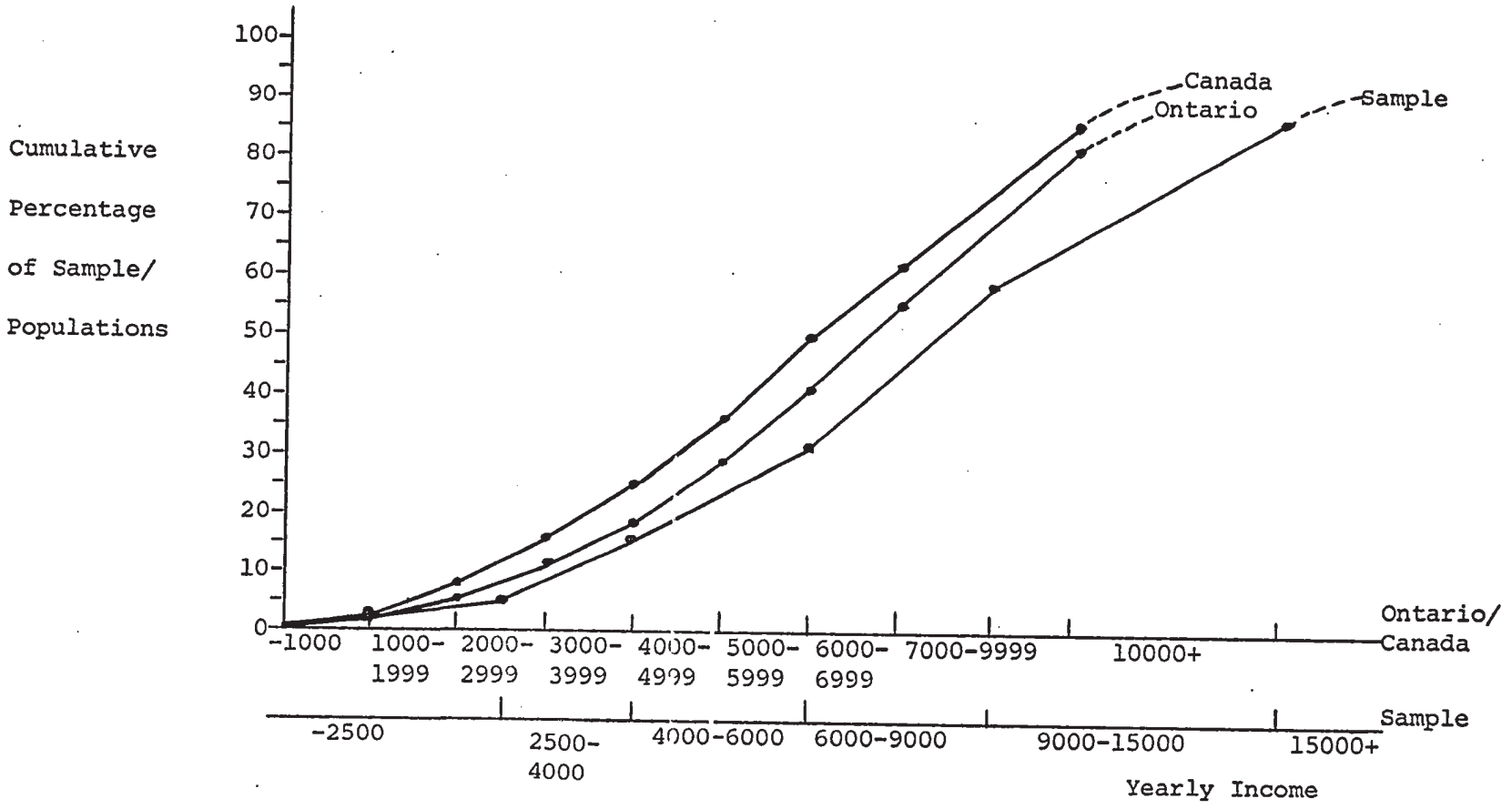
The cumulative income distribution of the sample, and of the populations of Ontario and Canada appear in Table 20. On average, the sample respondents have larger yearly incomes than the populations of Ontario and Canada. The difference between the sample and the two populations increased as the income level rose. Considering the likely direction of the distortion, the actual difference would be less than is shown. However, on average, the income distribution of the sample is probably biased upwards relative to the larger populations. This suggests the population was undersampled for lower income groups. The effect of this bias was not considered serious because the difference appeared to be small.

## General Findings

### 1. Credibility Measures

In examining the results of the credibility measures, it is appropriate to repeat that the advertisements were a representative cross-section of the total advertisements of the two stores. Further, they were not misleading price advertisements. The generality of the

TABLE 20. Comparison of sample respondents with the population of Ontario and Canada, by income distribution (cumulative)




Source for Ontario and Canada data - nonfarm family yearly income, 1965, from the Dominion Bureau of Statistics, Income Distribution, 1965. Catalogue 13-529.

advertisements and the resultant findings is limited by the products contained therein.

At this point, the investigation focuses on three aspects of the results. One, the response distributions to the credibility measures for the advertisements in total are examined. These show the consumers' propensity to accept the quoted prices in comparative price advertisements. Two, comparisons between or combinations of the measure results provide an understanding of the relationships which exist between the measures. Third, the range of responses, by measure, to the specific advertisements are explored. At a general level these findings reveal the effect of the different stimuli, i.e. store, discount size, on respondents. For purposes of clarity, the results for the first location advertisements ($A_1$, $B_1$, $C_1$, $D_1$) and the second location advertisements ($E_2$, $F_2$, $G_2$, $H_2$) are reported separately.

For the first location advertisements, only 35 percent of the consumers sampled believed the store usually sold the product for the quoted regular price (Table 21). The majority, 51 percent, didn't believe the stores' statements regarding the regular price. Considering the advertisements were not misleading, the high proportion of disbelief responses indicated the consumers were quite critical of these retailers.

The proportion of belief responses, in total, for the general reference measure was about the same as the store reference measure. Approximately one-third of the consumers believed the quoted regular price was the price people would usually have to pay for the product at other stores in town. These results again showed the majority of consumers didn't believe the quoted regular price.

TABLE 21. Response distribution, credibility measures, first location advertisements (percentages)

| Response | Advertisement $A_1$ Patton's Place 25% off | $B_1$ Simpsons 25% off | $C_1$ Patton's Place 50% off | $D_1$ Simpsons 50% off | Total |
|---|---|---|---|---|---|
| **Store reference measure** | | | | | |
| Belief | 29 | 50 | 22 | 41 | 35 |
| Uncertain | 17 | 12 | 8 | 16 | 13 |
| Nonbelief | 54 | 38 | 70 | 43 | 52 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 83 | 84 | 84 | 81 | 332 |
| **General reference measure** | | | | | |
| Belief | 36 | 37 | 29 | 43 | 36 |
| Uncertain | 30 | 20 | 24 | 17 | 23 |
| Nonbelief | 34 | 43 | 47 | 40 | 41 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | |
| Belief | 52 | 41 | 76 | 73 | 60 |
| Uncertain | 28 | 21 | 12 | 15 | 19 |
| Nonbelief | 20 | 38 | 12 | 12 | 21 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |

The combination of responses to the store reference and the general reference measures was the regular price credibility measure. The categorization method employed to obtain this measure was reported in Figure 2. A nonbelief response occurred when a consumer didn't believe the quoted regular price was the usual price the product sold for at that store and/or other stores in town. As reported in Table 22, the proportion of consumers in total who disbelieved the regular price credibility was 61 percent; the proportion who believed was 30 percent. The effect of combining the two measures was to increase disbelief responses by 10 percentage points from the store reference measure and 20 points from the general reference measure.

TABLE 22. Response distribution, regular price credibility, first location advertisements (percentages)

Regular price credibility

| | Advertisements | | | | |
|---|---|---|---|---|---|
| | $A_1$ | $B_1$ | $C_1$ | $D_1$ | |
| Response | Patton's Place 25% off | Simpsons 25% off | Patton's Place 50% off | Simpsons 50% off | Total |
| Belief | 28 | 36 | 20 | 36 | 30 |
| Uncertain | 13 | 9 | 5 | 9 | 9 |
| Nonbelief | 59 | 55 | 75 | 55 | 61 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 83 | 84 | 84 | 81 | 332 |

With regard to the regular price, 61 percent of the consumers sampled did not believe the store and/or other stores sold the product for the quoted regular price. This finding was evidence the average consumer was not a gullible, susceptible individual who believed all advertisments

she read. Rather, the average consumer was suspicious of advertised price claims and her reaction to the claims was that she did not believe the quoted regular price.

Considering the findings for the regular price credibility measure, the results obtained for the sale price measure were surprising. Although 61 percent of the consumers did not believe the regular price was credible, 60 percent thought the sale price was the lowest price in town. Only 21 percent disbelieved the sale price measure. These results showed that disbelief of the regular price didn't necessarily lead to a corresponding disbelief of the sale price.

This phenomenon can best be illustrated by combining the results of the regular price credibility measure and the sale price measure. As displayed in Table 23, the combinations can be expressed as probabilities - the probability of a respondent being in one category for the sale price measure, given she is in one category for the regular price credibility measure.

The probability of a respondent believing the sale price was the lowest price in town, given that she disbelieved the regular price credibility was .58. That is, 58 percent of the respondents who did not believe the quoted regular price did believe the sale price was the lowest price in town. Seventy-five percent of the respondents who believed the quoted regular price also believed the sale price was the best deal in town. Respondents were more likely to believe the sale price if they believed the regular price (.75) than if they didn't believe the regular price (.58). However, the difference between these proportions was not large (.17). Further, only 25 percent of the respondents who did not

TABLE 23. Response distribution and probability statements, regular price credibility by sale price measure

| | Advertisements $A_1$, $B_1$, $C_1$, $D_1$ | | | |
|---|---|---|---|---|
| | Sale Price Measure | | | |
| Regular Price Credibility | Belief | Uncertain | Nonbelief | Total |
| Belief | 74[1] | 12 | 13 | 99 |
| Uncertain | 8 | 17 | 5 | 30 |
| Nonbelief | 118 | 34 | 51 | 203 |
| TOTAL | 200 | 63 | 69 | 332 |

$P(N_{SP}|B_{RP}) = 13/99 = .13$[2]

$P(N_{SP}|N_{RP}) = 51/203 = .25$

$P(B_{SP}|B_{RP}) = 74/99 = .75$

$P(B_{SP}|N_{RP}) = 118/203 = .58$

[1]To be read; 74 respondents believed that the store and other stores usually sold the product for the quoted regular price (regular price credibility) and believed that the sale price was the lowest price in town (sale price measure).

[2]To be read; the probability of a respondent not believing that the sale price was the lowest price in town ($N_{SP}$) given that she believed the quoted regular price was the usual selling price for the product ($B_{RP}$) is .13.

believe the quoted regular price said they did not think the sale price was the lowest price in town.

These results revealed that regular price credibility was not a major determinant of sale price belief. The following discussion offers some possible interpretations of these results and they will be expanded in the final chapter.

The results are plausible. One possible interpretation requires the introduction of the perceived discount concept. The perceived discount is the percentage saving which the consumer thinks is offered by the advertisement.[3] A consumer could have disbelieved the quoted regular price, reduced this price by some amount and determined a perceived regular price - the price at which she thought the product was usually sold. The consumer may have felt the perceived discount was large enough to justify her thinking that the sale price was the lowest price in town. In this case, the consumer had used a rational method of processing the information.

An alternative interpretation was that the consumer didn't believe the regular price but, instead of calculating a perceived discount and then deciding on the sale price, she was influenced by the actual discount. That is, rather than changing the actual discount, she referred back to that information in making her decision on the sale price.

The difference in interpretation is important. In the first case, the consumer made adjustments based on her evaluation of the perceived

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[3]Perceived discount = (perceived regular price - sale price) / perceived regular price.

discount. In the second, the consumer made adjustments but did not use the adjustments in deciding on the sale price. In this instance, the fact the consumer disbelieved the regular price did not affect the sale price decision.

Another possible interpretation involves the consumer's image of the price level of the store. She may have incorporated her evaluation of the store's price competitiveness when she decided whether the sale price was the best deal in town. The consumer thought that generally the store had low prices. Then, when the store had a sale she thought the sale price was probably the best available. In this case, the important factor was the perceived price level of the store, not the regular price credibility.

It should be recognized that these interpretations are speculative in nature. The study cannot determine which decision process the consumer employed. However, some of the results can be used to suggest which of the cases may reflect the actual situation. These interpretations are offered as possibilities and the later analysis and discussion will suggest which possibility appears most likely.

In comparing the response distributions between the store reference measure and the general reference measure, the proportion of belief responses was approximately the same. However, there was a lower proportion of nonbelief responses (41 percent) and a corresponding increase in the proportion of uncertain responses. Uncertain responses were 13 percent of the total for the store reference measure but the same figure for the general reference measure was 23 percent. The difference in the proportion of uncertain responses between the two

measures was probably due to the different scope of the two questions. The store reference measure was confined to the consumer's evaluation of a specific store's statement. With the general reference measure, the consumer was asked to consider the price level of a specific store relative to other stores. The consumer needed to incorporate additional knowledge into her response to the general reference measure. Its broader scope may have caused the respondent to be more unwilling to commit herself (i.e. "yes", "no") because of her perceived, or actual, lack of store knowledge.

Examination of the range of responses to the advertisements, by measure, also suggested the measures tapped different factors. The proportion of consumers who disbelieved the store's statements (store reference measure) for a particular advertisement ranged from a low of 38 percent to a high of 70 percent, a difference of 32 percentage points. This difference was a strong indication that consumer belief of comparative price advertisements was influenced by the information provided by the particular advertisements, i.e. store, size of discount. The general reference measure results revealed that for particular advertisements, the range of nonbelief responses was from 34 percent to 48 percent, a difference of 14 percentage points. This range was lower than that for the store reference measure, an indication that different factors were influencing the responses to the two questions. In particular, the perceived price levels of the stores was a factor which influenced the response to the general reference measure but was not present with the store reference measure.

The reduction in range for the general reference measure also suggested the two factors - source credibility and price competitiveness - were operating in counteracting directions for the two stores. That is, the effect of the low credibility source was reduced by the effect of the competitive price image. The effects of these two factors will be fully discussed in Chapter VII.

The response distribution to the credibility measures for the second location advertisements ($E_2$, $F_2$, $G_2$, $H_2$) are reported in Table 24. These advertisements offered different products and different discount sizes - dishwashers at 40 percent off and portable television sets at 11 percent off. For the store reference measure, the proportion of disbelief responses was 33 percent. The proportion for a particular advertisement ranged from 12 percent to 64 percent, a difference of 52 percentage points. The disparity was, in part, a reflection of the wide difference between the discount sizes - 11 percent off and 44 percent off. Although the proportion of disbelief responses was lower (33 percent) for this set of advertisements than for the first set, there was still a substantial percentage of consumers who disbelieved the stores' statements regarding the regular price.

On the general reference measure, the proportion of belief responses was 40 percent across the four advertisements, with the disbelief proportion at 34 percent. The proportion of uncertain responses, at 26 percent was again higher than the corresponding figure for the store reference measure (18 percent). It appeared the broader scope of the general reference measure led to an increase in the consumer's uncertainty.

TABLE 24. Response distribution, credibility measures, second location advertisements (percentages)

| Response | Advertisement $E_2$ Patton's Place 44% off | $F_2$ Simpsons 40% off | $G_2$ Patton's Place 11% off | $H_2$ Simpsons 11% off | Total |
|---|---|---|---|---|---|
| **Store reference measure** | | | | | |
| Belief | 13 | 50 | 55 | 78 | 49 |
| Uncertain | 22 | 23 | 17 | 10 | 18 |
| Nonbelief | 65 | 27 | 28 | 12 | 33 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 82 | 84 | 83 | 83 | 332 |
| **General reference measure** | | | | | |
| Belief | 9 | 36 | 52 | 64 | 40 |
| Uncertain | 34 | 30 | 23 | 17 | 26 |
| Nonbelief | 57 | 34 | 25 | 19 | 34 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | |
| Belief | 46 | 51 | 59 | 49 | 52 |
| Uncertain | 38 | 26 | 16 | 21 | 25 |
| Nonbelief | 16 | 23 | 25 | 30 | 23 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |

Considering the regular price credibility (Table 25), 34 percent of the consumers did not believe the store and/or other stores usually sold the product for the quoted regular price. Forty-three percent of the consumers believed the quoted regular price and 15 percent were uncertain. It is interesting to note that the proportion of belief responses on the regular price credibility measure was higher (43 percent) than for the general reference measure (40 percent). The cause of this phenomenon was a high degree of association between the store reference measure and the general reference measure - a contingency coefficient of .676[4] - and in the classification method employed (Figure 2). Most consumers were consistent in their responses to the two measures (e.g. "yes" to both) and any consumer who had an uncertain response and an affirmative response was classified in the "belief" category.

TABLE 25. Response distribution, regular price credibility, second location advertisements (percentages)

Regular price credibility

| | Advertisements | | | | |
|---|---|---|---|---|---|
| | $E_2$ | $F_2$ | $G_2$ | $H_2$ | |
| Response | Patton's Place 44% off | Simpsons 40% off | Patton's Place 11% off | Simpsons 11% off | Total |
| Belief | 10 | 39 | 51 | 71 | 43 |
| Uncertain | 19 | 19 | 14 | 8 | 15 |
| Nonbelief | 71 | 42 | 35 | 21 | 42 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 82 | 84 | 83 | 83 | 332 |

[4]Maximum attainable value for a 3X3 table is .816.

The proportion of consumers who thought the sale price was the best deal in town was 52 percent. Considering only 43 percent of the consumers thought the regular price was credible, this result was again surprising. It indicated that disbelief of the quoted regular price did not necessarily lead to disbelief that the sale price was the lowest in town.

In summary, the credibility measure responses revealed a low degree of consumer willingness to accept the regular price as quoted - only 30 percent for the first set of advertisements and 43 percent for the second. The consumers were highly suspect of the advertised claims made by the selected retailers. However, when the consumers were asked if the sale price was the lowest price in town, a relatively high proportion believed it was - 60 percent for the first set of advertisements, 52 percent for the second. This apparent reversal in consumer belief (low for regular price credibility, high for sale price) was unexpected but not necessarily contradictory. The consumer, for a number of reasons which have been enumerated, may have not believed the regular price, but believed that the sale price was the lowest price in town. The implications of these findings for government officials and retailers will be discussed in Chapter VIII.

2. Perceived Size of Discount

The findings to one of the two open-ended questions following each of the dependent variable questions are reported here. If a respondent answered Question 1, 2 and/or 4 negatively, she was asked what price she thought the regular/sale price was. From this, the consumer's perceived discount was calculated. For example, assume that a product

has a quoted regular price of $100 and is on sale for $50. The consumer does not believe the quoted regular price and thinks the product usually sells for $80. The perceived discount is 38 percent.

The perceived discounts for the regular price credibility are reported in Table 26. For the stated discount of 25 percent, the mean perceived discounts were 6 percent and 10 percent for Advertisements A and B respectively. The difference between the perceived and actual discounts were 19 percent and 15 percent. When the discount size was 50 percent, the mean perceived discounts were 33 percent and 31 percent (Advertisements C and D). The difference between the actual and perceived discount was approximately 18 percent. It is interesting to note that for all four advertisements, the difference between the actual and perceived discount was approximately the same, i.e. around 18 percent. Although the discount size was twice as large for Advertisements C and D, the consumers reduced the actual discount by approximately the same difference (18 percent) as for the 25 percent off advertisements (A and B). The reason(s) for this are not known.

The two 40 percent off advertisements, $E_2$ and $F_2$, had mean perceived discounts of 18 percent and 22 percent respectively. The differences between the actual and perceived discounts were 26 percent and 18 percent. These are very similar to the differences obtained for the first location advertisements, particularly when the regular price bias of Advertisement $E_2$ is considered. That is, Advertisement $E_2$ had the highest regular price ($520) of any of the advertised products. This could bias the consumer's response to the regular price credibility measures and the response to the "perceived price" question.

TABLE 26. Perceived discount sizes, regular price credibility, all advertisements[1]

| | Advertisement | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H |
| A. Regular price (%) = | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| B. Perceived regular price as a percentage of regular price (A) | 80[2] | 83 | 75 | 73 | 68 | 77 | 87 | 85 |
| C. Actual sale price as a percentage of regular price | 75 | 75 | 50 | 50 | 56 | 60 | 89 | 89 |
| D. Perceived size of discount = (B-C)/B (%) | 6 | 10 | 33 | 31 | 18 | 22 | - 2 | - 5 |
| E. Actual size of discount = (A-C)/A (%) | 25 | 25 | 50 | 50 | 44 | 40 | 11 | 11 |
| F. Difference between actual and perceived size of discount = (E-D) (%) | 19 | 15 | 17 | 19 | 26 | 18 | 13 | 16 |

[1]Data base, all respondents who did not think the regular price was credible. This includes responses to third location advertisements ($A_3$, $B_3$, $C_3$, $D_3$).

[2]To be read; for those respondents who did not think the regular price was credible, they thought, on average, that the usual selling price for the product was 80 percent of the stated regular price.

An interesting result occurred with the last two advertisements, $G_2$ and $H_2$, which had discount sizes of 11 percent. The consumers who did not believe the quoted regular price, thought the usual selling price was below the quoted sale price. That is, these consumers thought the store was setting their sale price at a level which was higher than the usual selling price. The differences between the perceived and actual discounts were 13 percent and 16 percent for Advertisement $G_2$ and $H_2$ respectively. Again, these differences are similar to the differences obtained for the previous six advertisements.

Those consumers who did not think the sale price was the lowest price in town were asked what they thought they could buy the product for. Their responses were used to calculate the perceived sale price by advertisement. The perceived sale prices reported in Table 27 are expressed as percentages of the quoted sale price.

The perceived sale prices ranged from 83 to 97 percent of the stated sale price. On average, the consumers thought they could purchase the product for approximately 10 to 12 percent less than the quoted sale price. For many of them, this potential saving is probably large enough for them to shop at other stores in an attempt to realize the saving. It would seem reasonable to conclude that if these consumers were planning to purchase one of the advertised products, they would likely seek additional information on prices at other stores before they purchased the product. The effect of the advertised price claim for these consumers was minimal because they thought, on average, they could purchase the product for 10 to 12 percent less than the stated price.

TABLE 27. Perceived sale price, sale price measure, all advertisements[1]

| | Advertisement | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H |
| A. Sale price (%) = | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| B. Perceived sale price as a percentage of the sale price (A) | 83[2] | 85 | 90 | 88 | 91 | 97 | 88 | 88 |
| C. Difference between actual and perceived sale price (A-B) | 17 | 15 | 10 | 12 | 9 | 3 | 12 | 12 |

[1]Data base, all respondents who did not think the sale price was the lowest price in town. This includes responses to the third location advertisements ($A_3$, $B_3$, $C_3$, $D_3$).

[2]To be read; for those respondents who did not think the sale price was the lowest price in town, they thought, on average, that they could buy the product for 83 percent of the stated sale price.

# CHAPTER VI

## TESTS OF HYPOTHESES

Three factors - social class, store and size of discount - were hypothesized to influence the credibility of comparative price retail advertisements. The effect of shopping experience on credibility will be examined because of the findings on image differences between shoppers and nonshoppers. Finally, the disbelief reasons will be reported to provide additional information on why consumers did not believe the quoted prices.

Three questions were employed to measure the credibility of comparative price advertisements - the store reference measure, general reference measure and sale price measure. Because the questions measured specific aspects of credibility, the majority of hypotheses tests will check for differences in response distribution by measure. It is recognized that the three measures were dependent (See Chapter IV) and the interpretation of the results will consider this fact.

The difference in proportions was chosen for hypotheses testing[1] because it can be applied to ordinal scale data and problems of small sample sizes could be kept to a minimum. Chi-square was rejected because of sample size problems in certain instances.

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[1]For a discussion of this test, see Wilfrid J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis, Third Edition, New York: McGraw-Hill Book Company, Inc., pp. 249-250.

No specific level of significance was set for accepting or rejecting an hypothesis. The nature of the experimental design, a number of stimuli in the form of advertisements, lent itself to analysis which examined patterns of responses. This warranted the use of multiple levels of significance. The approach provided flexibility which was deemed appropriate for this research.

The analysis focused, with certain exceptions, on the proportion of disbelief responses. This response category was selected because it usually contained the largest proportions of the three responses - belief, uncertain, nonbelief - reducing sample size problems. In certain cases, if the tests had been conducted on the proportion of belief responses, the results would have been slightly different. These cases will be noted.

Hypothesis Test - Social Class

Null hypothesis: For three different social classes, the proportion of housewives reporting disbelief in comparative price retail advertisements will be equal.

Alternative hypothesis: For three different social classes, the proportion of housewives reporting disbelief in comparative price retail advertisements will be significantly different.

Social class effects were analyzed by a series of tests. The first examined the response distribution across the first location advertisements ($A_1$, $B_1$, $C_1$, $D_1$). The possible effects of the different advertisements on social class were controlled by having an equal number

of respondents by social class by advertisement. This was achieved by randomly removing the required number of respondents from the total sample. The response distribution by social class for the three credibility measures and the proportion tests are presented in Table 28. For all three measures, no significant differences occurred at the .10 or greater level. These findings support the acceptance of the null hypothesis.

The second test moved to the level of the individual advertisement. The possibility existed that one or more of the first location advertisements could contain factors which might affect a particular social class. The response distributions by social class for the three credibility measures are presented in Table 29 and the proportion tests are shown in Table 30.

The results, with two exceptions, showed no significant differences ($\alpha = .10$) in the proportion of disbelief responses by social class. The two exceptions involve the comparisons between working and middle class. The working class had a greater tendency to disbelieve the store's statement regarding the regular price (Advertisement $D_1$) and to disbelieve that other stores usually sold the product for the quoted regular price (Advertisement $B_1$). These exceptions should be considered with the total results.

The results suggest that no one social class consistently disbelieved the credibility of comparative price advertisements more than any other class. This can be seen by the direction of the differences for the calculated statistic. The directions, i.e. positive or negative, were not consistent in the social class comparisons. For example, in

TABLE 28. Response distribution and significance test for social class effect, total first location advertisements

Response distribution - advertisements $A_1$, $B_1$, $C_1$, $D_1$ (percentages)

| Response | Store Reference Measure | | | General Reference Measure | | | Sale Price Measure | | |
|---|---|---|---|---|---|---|---|---|---|
| | Working | Middle | Middle -Upper | Working | Middle | Middle -Upper | Working | Middle | Middle -Upper |
| Belief | 34 | 39 | 41 | 34 | 43 | 43 | 60 | 63 | 59 |
| Uncertain | 13 | 13 | 7 | 26 | 17 | 18 | 21 | 14 | 17 |
| Nonbelief | 53 | 48 | 52 | 40 | 40 | 39 | 19 | 23 | 24 |
| | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 |

Test: Two-tailed test for differences in proportions for independent samples

| Measure | Distribution of Statistic | Statistic: Working Class-Middle Class[1] | Working Class-Middle-Upper Class | Middle Class-Middle-Upper Class |
|---|---|---|---|---|
| Store Reference | Z | .62 | .16 | -.47 |
| General Reference | Z | .16 | .16 | .00 |
| Sale Price | Z | -.57 | -.75 | -.18 |

*Z (.10, two-tailed) = 1.65

[1]The difference in proportion of nonbelief responses to total responses - working class minus middle class.

TABLE 29. Response distribution, credibility measures, by social class, first location advertisements (percentages)

| | $A_1$ Patton's Place 25% off | | | $B_1$ Simpsons 25% off | | | $C_1$ Patton's Place 50% off | | | $D_1$ Simpsons 50% off | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Response | W | M | M-U | W | M | M-U | W | M | M-U | W | M | M-U |
| **Store reference measure** | | | | | | | | | | | | |
| Belief | 30 | 28 | 29 | 43 | 54 | 52 | 20 | 19 | 25 | 29 | 55 | 50 |
| Uncertain | 19 | 17 | 14 | 14 | 12 | 10 | 10 | 8 | 7 | 20 | 18 | 6 |
| Nonbelief | 51 | 55 | 57 | 43 | 34 | 38 | 70 | 73 | 68 | 51 | 27 | 44 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 37 | 18 | 28 | 28 | 35 | 21 | 30 | 26 | 28 | 41 | 22 | 18 |
| **General reference measure** | | | | | | | | | | | | |
| Belief | 32 | 39 | 39 | 21 | 49 | 38 | 27 | 35 | 25 | 34 | 50 | 56 |
| Uncertain | 35 | 22 | 29 | 25 | 20 | 14 | 30 | 15 | 25 | 22 | 18 | 6 |
| Nonbelief | 33 | 39 | 32 | 54 | 31 | 48 | 43 | 50 | 50 | 44 | 32 | 38 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | | | | | | | | |
| Belief | 49 | 50 | 57 | 39 | 49 | 29 | 73 | 69 | 85 | 78 | 73 | 61 |
| Uncertain | 37 | 22 | 18 | 21 | 20 | 23 | 17 | 8 | 11 | 12 | 18 | 17 |
| Nonbelief | 14 | 28 | 25 | 40 | 31 | 48 | 10 | 23 | 4 | 10 | 9 | 22 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Key: W = Working Class
M = Middle Class
M-U = Middle-Upper Class

TABLE 30. Significance test for social class effect, first location advertisements

Test: Two-tailed test for differences in proportions for independent samples.

Working Class - Middle Class[1]

| Measure | Distribution of Statistic | Statistic $A_1$ | $B_1$ | $C_1$ | $D_1$ |
|---|---|---|---|---|---|
| Store reference | Z | -.29 | .69 | -.25 | 1.83* |
| General reference | Z | -.47 | 1.77* | -.50 | .93 |
| Sale price[2] | Z | -.09 | -.74 | .34 | .47 |
| **Working Class - Middle-Upper Class** | | | | | |
| Store reference | Z | -.46 | .34 | .18 | .48 |
| General reference | Z | .02 | .41 | -.51 | .36 |
| Sale price | Z | -.68 | .78 | -1.16** | 1.34 |
| **Middle Class - Middle-Upper Class** | | | | | |
| Store reference | Z | -.11 | -.29 | .42 | -1.13 |
| General reference | Z | .47 | -1.21 | .00 | -.47 |
| Sale price | Z | -.47 | 1.47 | -1.46** | .78 |

* Z (.10, two-tailed) = 1.65
** Np or Nq < 5

[1]The difference in proportion of nonbelief responses to total responses - working class minus middle class.

[2]The difference in proportion for the sale price measure is based on the proportion of belief responses to total responses.

the comparison of the working and middle class, the sign directions were equal. In six cases the statistic was positive and in six cases, negative. The results of the second test support the acceptance of the null hypothesis.

The third test examined the second location advertisements. The response distributions by social class for the three credibility measures are presented in Table 31 and the proportion tests are shown in Table 32.

With this test, five significant differences ($\alpha = .10$) occurred, involving comparisons between the working class and the two remaining classes. Further, the differences occurred with the two dishwasher advertisements. The significant differences were:

a) The proportion of disbelief responses for the working class was significantly less than for the middle class for the store reference measure on Advertisement $E_2$.

b) The proportion of disbelief responses for the working class was significantly greater than for the middle class and the middle-upper class for the general reference measure on Advertisement $F_2$.

c) The proportion of belief responses for the working class was significantly less than for the middle class and the upper-middle class for the sale price measure on Advertisement $F_2$.

These results suggest that of the three stimuli present - source, message content, product - the working class may not have considered the source or the message content.

TABLE 31. Response distribution, credibility measures, by social class, second location advertisements (percentages)

| | $E_2$ Patton's Place 44% off | | | $F_2$ Simpsons 40% off | | | $G_2$ Patton's Place 11% off | | | $H_2$ Simpsons 11% off | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | M | M-U | W | M | M-U | W | M | M-U | W | M | M-U |
| **Store reference measure** | | | | | | | | | | | | |
| Belief | 13 | 9 | 22 | 32 | 59 | 64 | 60 | 46 | 57 | 76 | 81 | 79 |
| Uncertain | 35 | 12 | 17 | 33 | 18 | 14 | 16 | 21 | 14 | 12 | 9 | 7 |
| Nonbelief | 52 | 79 | 61 | 35 | 23 | 22 | 24 | 33 | 29 | 12 | 10 | 14 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 31 | 33 | 18 | 34 | 22 | 28 | 38 | 24 | 21 | 33 | 22 | 28 |
| **General reference measure** | | | | | | | | | | | | |
| Belief | 6 | 9 | 11 | 15 | 55 | 46 | 47 | 54 | 57 | 64 | 59 | 68 |
| Uncertain | 42 | 33 | 22 | 35 | 23 | 29 | 21 | 21 | 29 | 24 | 14 | 11 |
| Nonbelief | 52 | 58 | 67 | 50 | 22 | 25 | 32 | 25 | 14 | 12 | 27 | 21 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | | | | | | | | |
| Belief | 42 | 45 | 56 | 35 | 59 | 64 | 66 | 50 | 57 | 48 | 50 | 50 |
| Uncertain | 45 | 37 | 28 | 38 | 14 | 22 | 13 | 21 | 14 | 18 | 23 | 21 |
| Nonbelief | 13 | 18 | 16 | 27 | 27 | 12 | 21 | 29 | 29 | 34 | 27 | 29 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Key: W = Working Class
M = Middle Class
M-U = Middle-Upper Class

TABLE 32. Significance test for social class effect, second location advertisements

Test: Two-tailed test for differences in proportions for independent samples.

Working Class - Middle Class[1]

| Measure | Distribution of Statistic | Statistic $E_2$ | $F_2$ | $G_2$ | $H_2$ |
|---|---|---|---|---|---|
| Store reference | Z | -2.29* | 1.00 | - .83 | .35** |
| General reference | Z | - .48 | 2.04* | .55 | -1.42** |
| Sale price[2] | Z | - .28 | -1.75* | 1.23 | - .11 |
| **Working Class - Middle-Upper Class** | | | | | |
| Store reference | Z | - .64 | 1.20 | - .41 | - .25** |
| General reference | Z | -1.02 | 2.01* | 1.46** | - .98** |
| Sale price | Z | - .92 | -2.27* | .66 | - .12 |
| **Middle Class - Middle-Upper Class** | | | | | |
| Store reference | Z | 1.35 | .11 | .34 | - .56** |
| General reference | Z | - .64 | - .19 | .90** | .48 |
| Sale price | Z | - .69 | - .38 | - .48 | .00 |

* Z (.10, two-tailed) = 1.65
** Np or Nq < 5

[1]The difference in proportion of nonbelief responses to total responses - working class minus middle class.

[2]The difference in proportion for the sale price measure is based on the proportion of belief responses to total responses.

Advertisement $E_2$ was considered a low source advertisement on two counts: a low credibility source (Patton's Place) and a low credibility message (discount size of 44 percent). Advertisement $F_2$ was considered a low credibility advertisement on one count: a low credibility message (discount size of 40 percent).

Examination of the store reference and general reference measure revealed that the responses of the middle and middle-upper class respondents were as predicted. Their disbelief of Advertisement $E_2$ was considerably greater than their disbelief of Advertisement $F_2$ on both measures. The working class did not discriminate between the two advertisements. The proportion of disbelief responses by the working class to the two advertisements was similar - 35 percent on one measure, approximately 50 percent on the remaining three measures. This suggests the two stimuli - source and message content - had little or no effect. The lack of discrimination by the working class respondents between Advertisements $E_2$ and $F_2$ resulted in the change in direction of the significant difference. For Advertisement $E_2$, the middle class respondents had the highest proportion of disbelief responses but for Advertisement $F_2$ the working class respondents had the highest proportion of disbelief responses.

If the proportion tests had been conducted on the belief responses instead of the nonbelief responses, two additional significant differences would have been obtained. The store reference measure statistic (Z) would have shown significant differences between the working and middle class (1.97) and between the working and middle-upper class (2.50). These results would also have suggested that the two stimuli -

source, message content - had little or no effect on the working class respondents.

Dishwashers are a high-cost luxury item and it is reasonable to assume that working class respondents did not consider dishwashers as a possible product acquisition. The working class group would have little product knowledge, including price, of dishwashers, relative to the middle and upper-middle class groups. The lack of product knowledge was supported by the results. The working class had a higher proportion of uncertain (don't know) responses than either the middle or upper-middle class on the credibility measures for the two advertisements.

In summary, the significant differences in the proportion of disbelief responses by social class on Advertisements $E_2$ and $F_2$ appeared to be caused by the product on sale. The fact that it was a dishwasher was the most significant stimulus for the working class and other stimuli had little opportunity to influence their responses. The differences between the working and upper-middle class respondents can be attributed to the same reasons. Lack of significant differences between social class respondents for the six other advertisements support these conclusions. The products on sale - chesterfield and chairs and portable television sets - were likely to be purchased by all consumers, regardless of social class.

The results lead to a general acceptance of the null hypothesis. The first two tests support this decision. In particular, the absence of any trend in the proportion of disbelief responses to the advertisements by social class was evidence that supported the acceptance of the null hypothesis.

The null hypothesis was accepted with one modification. Housewives had an equal tendency to disbelieve comparative price advertising, regardless of social class, unless the advertisement contained what might be called a class-biased product. A class-biased product is one not normally purchased by a member of a particular social class. In this case, it was a dishwasher which is not usually purchased by members of the working class. The effect was a greater proportion of uncertain responses for the affected social class respondents and an inability or unwillingness to discriminate between the other stimuli present (source, content of message).

Previous research on advertising credibility had suggested the possibility of a relationship between credibility and social class.[2,3,4] The results of the study do not support this contention. Any explanation of the difference in conclusions must be based, in part, on speculation because the detailed methodology of the other studies is not available. The differences could be accounted for by the type of advertising studied and/or the credibility measures employed. This research investigated the credibility of comparative price advertisements and determined consumers' belief in the quoted prices in the advertisements. This was in contrast

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[2]Sidney J. Levy, "Social Class and Consumer Behavior", in Harold H. Kassarjian and Thomas S. Robertson (eds.), Perspectives in Consumer Behavior, Glenview: Scott, Foreman and Co., 1968, pp. 387-397.

[3]G. I. Duncan and F. H. Lund, "The Validity of Health Information Gained Through Radio Advertising", Research Quarterly, XVI, (Spring, 1945), 102-105.

[4]Gary A. Steiner, "The People Look at Commercials: A Study of Audience Behavior", Journal of Business, XXXIX, (April, 1966), 272-300.

in particular, to the approach taken by Levy.[5] Levy's conclusions, that class differences existed in attitudes towards advertising, were based on responses to open-ended questions. As stated previously, these conclusions should probably be regarded as general impressions. However, assuming the differences hold for advertising in general, the question would remain as to whether class differences hold for specific situations, i.e. comparative price advertisements.

The results of this study revealed that class differences existed only when a class-biased product was contained in the advertisement. This suggested that experience may be a factor in the credibility of comparative price advertisements. Because of the extent of comparative price advertising, consumer experience with this kind of advertising is probably relatively great, regardless of class. Therefore, differences in credibility would not be expected unless the advertisement contained class-biased information.

The social class tests revealed that the working class had a high proportion of uncertain responses for the dishwasher advertisements ($E_2$ and $F_2$). Lack of product knowledge was suspected as the probable cause. A further examination was made to see if uncertain responses, in general, were related to either social class or shopping experience. It was expected that nonshoppers would have a higher proportion of uncertain responses than either shoppers or buyers.

Uncertain responses to the first location advertisements ($A_1$, $B_1$, $C_1$, $D_1$) were categorized by shopping experience and by social class

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[5]Levy, loc. cit.

(Table 33). Selected differences in proportions by social class and by shopping experience were calculated and are reported in Table 34. For two of the three credibility measures, store reference measure and general reference measure, the proportion of uncertain responses for nonshoppers was significantly greater than that for shoppers and buyers. There were no significant differences in the proportion of uncertain responses by social class.

## Hypothesis Test - Store

Store effect is measured by comparing the response distributions to matched advertisements from the two stores, e.g. Advertisements $A_1$ and $B_1$. In addition, a secondary hypothesis on store effect will also be tested using the semantic differentials (believable advertising and reliable advertising) to calculate the respondents' retailer credibility score. The respondents will then be divided into two groups - those who have a low retailer credibility image and those with a high retailer credibility image. Comparisons in response distributions between these two groups by store will be made to determine if retailer credibility image is related to credibility.

One cautionary note is required in regard to the second test. In the questioning sequence, respondents were first asked the questions concerning the advertisements and then asked to evaluate the stores on the semantic differentials. This sequence may have led to a conditioning effect on respondents. That is, a respondent may have stated belief in the prices contained in the advertisements and then, in order to be consistent, favorably evaluated the retailer credibility scales.

TABLE 33. Uncertain response, by social class, by shopping experience, first location advertisements

| Response | Nonshoppers | | | | Shoppers | | | | Buyers | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | M | M-U | Total | W | M | M-U | Total | W | M | M-U | Total |
| **Store reference measure** | | | | | | | | | | | | |
| Uncertain | 24 | 19 | 17 | 21 | 11 | 11 | 8 | 10 | 5 | 9 | 6 | 7 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 72 | 31 | 24 | 127 | 27 | 27 | 24 | 78 | 37 | 43 | 47 | 127 |
| **General reference measure** | | | | | | | | | | | | |
| Uncertain | 35 | 23 | 25 | 30 | 15 | 19 | 21 | 18 | 24 | 16 | 17 | 19 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | | | | | | | | |
| Uncertain | 26 | 16 | 21 | 23 | 19 | 18 | 8 | 15 | 16 | 16 | 19 | 17 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Key: W = Working Class
M = Middle Class
M-U = Middle-Upper Class

TABLE 34. Significance test for social class effect and shopping experience effect on uncertain responses

Test: Two-tailed test for differences in proportions for independent samples.

Differences in social class - nonshoppers only

| Measure | Distribution of Statistic | Statistic: W - M[1] | W - M-U | M - M-U |
|---|---|---|---|---|
| Store reference | Z | .48 | .71 | .26 |
| General reference | Z | 1.22 | .88 | - .21 |
| Sale price | Z | 1.13 | .54 | - .49 |

Key: W = Working Class
M = Middle Class
M-U = Middle-Upper Class

Differences in shopping experience

| Measure | Distribution of Statistic | $\bar{S}$ - S[2] | $\bar{S}$ - B | S - B |
|---|---|---|---|---|
| Store reference | Z | 2.03** | 3.24** | .80 |
| General reference | Z | 1.91* | 2.05** | - .17 |
| Sale price | Z | 1.29 | 1.10 | - .36 |

* Z (.10, two-tailed) = 1.65
** Z (.05, two-tailed) = 1.96

Key: $\bar{S}$ = Nonshoppers
S = Shoppers
B = Buyers

[1]The proportion of uncertain responses to total responses: working class minus middle class.

[2]The proportion of uncertain responses to total responses: nonshoppers minus shoppers.

The store reference measure was used to test this hypothesis because it was designed to measure credibility of the store's statements without involving external reference. The other two measures introduce the dimension of consumer perception of the general price level of the subject store relative to other stores. The results for the sale price measure will be reported for the first test to show the effects of the competitive price dimension.

1. Store Effect

Null hypothesis: The proportion of housewives reporting disbelief in comparative price retail advertisements will be equal between similar advertisements from two stores.

Alternative hypothesis: The proportion of housewives reporting disbelief in comparative price retail advertisements will be greater for advertisements from a low credibility store than for advertisements from a high credibility store.

The distribution of responses to the four pairs of matched advertisements ($A_1$ - $B_1$, $C_1$ - $D_1$, $E_2$ - $F_2$, $G_2$ - $H_2$) are shown in Table 35 and the results of the proportion tests appear in Table 36. The results support rejection of the null hypothesis. However, two pairs of advertisements ($C_1$ and $D_1$, $E_2$ and $F_2$) were not matched for all variables.

As noted previously, Advertisements $E_2$ and $F_2$ differed with respect to two variables besides the store - the discount size (Advertisement $E_2$ was 44 percent off and Advertisement $F_2$ was 40 percent off) and the quoted regular price (Advertisement $E_2$ was $520 and Advertisement $F_2$ was $340).

TABLE 35. Response distribution, credibility measures, all advertisements (percentages)

| Response | $A_1$ | $B_1$ | $C_1$ | $D_1$ | $E_2$ | $F_2$ | $G_2$ | $H_2$ |
|---|---|---|---|---|---|---|---|---|
| **Store reference measure** | | | | | | | | |
| Belief | 29 | 50 | 22 | 41 | 13 | 50 | 55 | 78 |
| Uncertain | 17 | 12 | 8 | 16 | 22 | 23 | 17 | 10 |
| Nonbelief | 54 | 38 | 70 | 43 | 65 | 27 | 28 | 12 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N - | 83 | 84 | 84 | 81 | 82 | 84 | 83 | 83 |
| **General reference measure** | | | | | | | | |
| Belief | 36 | 37 | 29 | 43 | 9 | 36 | 52 | 64 |
| Uncertain | 30 | 20 | 24 | 17 | 34 | 30 | 23 | 17 |
| Nonbelief | 34 | 43 | 47 | 40 | 57 | 34 | 25 | 19 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Sale price measure** | | | | | | | | |
| Belief | 52 | 41 | 76 | 73 | 46 | 51 | 59 | 49 |
| Uncertain | 28 | 21 | 12 | 15 | 38 | 26 | 16 | 21 |
| Nonbelief | 20 | 38 | 12 | 12 | 16 | 23 | 25 | 30 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

These differences could have biased the results by increasing the difference in disbelief proportions and the statistic (Z = 4.82) between the two advertisements. Similarly, the significant difference in proportions between Advertisements $C_1$ and $D_1$ (Z = 3.51) may have been accounted for in part by the different regular price levels (Advertisement $C_1$ was $370 and Advertisement $D_1$ was $300).

TABLE 36. Significance test for store effect for all advertisements

Test: One-tailed test for differences in proportions for independent samples.

| Measure | Distribution of Statistic | Statistic[1] $A_1 - B_1$ | $C_1 - D_1$ | $E_2 - F_2$ | $G_2 - H_2$ |
|---|---|---|---|---|---|
| Store reference | Z | 2.09* | 3.51* | 4.82* | 2.53* |
| Sale price | Z | -2.50* | - .09 | -1.10 | - .69 |

* Z (.05, one-tailed) = 1.65

[1]Direction of difference: first proportion minus second proportion, i.e., $A_1$ minus $B_1$.

The two remaining pairs of matched advertisements differed only with respect to store. The fact that both pairs had significant differences in proportions was a strong indication that store effect was a significant influence on credibility. Further, it suggests the significant differences between Advertisements $C_1$ and $D_1$ and Advertisements $E_2$ and $F_2$ were due, in large part, to the two stores. The proportion of disbelief responses was significantly different in the predicted direction between the stores for each of the four pairs of advertisements tested. The null hypothesis was rejected. When similar messages were presented

by two stores, more consumers were willing to accept the statements of a high credibility source (Simpsons) than a low credibility source (Patton's Place).

This finding substantiates previous source credibility findings within the retailer/consumer framework. Previous studies had found the credibility of the source influenced the acceptance of his message. The more credible the source, the more likely his conclusions will be accepted by the audience.[6] Here, the credibility of the retailer influences acceptance of his message. Consumers see advertisers as having varying degrees of credibility and these perceptions influence acceptance of retailers' statements.

The results from the sale price measure gave response patterns which were quite dissimilar from those for the store reference measure. The results revealed that for the four pairs of advertisements, Patton's Place had a lower proportion of disbelief responses than Simpsons. In one case (Advertisement $A_1 - B_1$) the difference in proportion of disbelief responses was significant ($\alpha = .05$). A greater proportion of consumers thought the sale price of the product at Patton's Place, as opposed to Simpsons, was the best deal in town.

Results for the two measures may be reconciled by considering the two store image components: credibility and price competitiveness. Simpsons was seen as a credible source and the store reference measure results showed Simpsons achieved greater belief than Patton's Place. The latter was seen, on average, as having quite competitive prices while

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[6]Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, Communication and Persuasion, (Yale University Press, 1953).

Simpsons had slightly competitive prices. The effect of the competitive price image was incorporated in the sale price measure. Belief that the sale price was the best deal in town was partially dependent on the perceived price level of the subject store relative to other stores.

While consumers were more likely to disbelieve the statements of Patton's Place (store reference measure), they were also more likely to have thought the sale prices at the store were the best in town. It appears the competitive price image achieved by Patton's Place led to a high acceptance of their quoted sale price as being the best deal.

If the proportion tests for the sale price measure had been conducted on the belief responses, the results would have differed slightly. The test between Advertisements $E_2$ and $F_2$ would have shown a higher proportion of belief responses for the Simpsons advertisement ($Z = .62$). This difference was due to the high proportion of uncertain responses for Advertisement $E_2$ (.38). Apart from this, the results were consistent.

2. Retailer Credibility Effect

Null hypothesis: The proportion of housewives reporting disbelief in comparative price retail advertisements will be equal between those housewives who have a high retailer credibility image and those housewives with a low retailer credibility image.

Alternative hypothesis: The proportion of housewives reporting disbelief in comparative price retail advertisements will be lower for those housewives who have a

high retailer credibility image than for those housewives with a low retailer credibility image.

The subjects in this case were those who had shopped or bought at the store; nonshoppers were dropped from this analysis (See Chapter IV). Credibility image was determined for each store by the sum of the two advertising scales (reliable advertising, believable advertising). The scores ranged from two to 14. A low retailer credibility image was defined as a score of less than eight; a high retailer credibility image was a score of eight or more. Belief responses and uncertain responses were combined into one category because of low cell sizes. Further, the proportion tests were conducted on the combined advertisements by store because of low cell sizes.

The distribution of responses by retailer credibility image appear in Table 37; results of the analysis appear in Table 38. The results show that consumers who had a low retailer credibility image had a significantly greater proportion of disbelief responses than consumers with a high retailer credibility image, regardless of the store. The null hypothesis was rejected and the alternative hypothesis was accepted. A consumer's image of the retailer's credibility influenced her acceptance of the retailer's message.

As was previously mentioned, these conclusions must be qualified because of the possible conditioning effect of the questioning sequence. The respondents' answers to the credibility measures may have led to a particular response to the advertising scales.

TABLE 37. Response distribution, store reference measure, by retailer credibility measure, shoppers and buyers (percentages)

| | $A_1$ | | | $B_1$ | | | $C_1$ | | | $D_1$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Response | Low[1] | High[2] | Total | Low | High | Total | Low | High | Total | Low | High | Total |
| Belief-Uncertain | 6 | 53 | 36 | 38 | 68 | 61 | 16 | 42 | 29 | 33 | 64 | 57 |
| Nonbelief | 94 | 47 | 64 | 62 | 32 | 39 | 84 | 58 | 71 | 67 | 36 | 43 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 17 | 30 | 47 | 13 | 38 | 51 | 25 | 26 | 51 | 12 | 44 | 56 |

| | $E_2$ | | | $F_2$ | | | $G_2$ | | | $H_2$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Response | Low | High | Total | Low | High | Total | Low | High | Total | Low | High | Total |
| Belief-Uncertain | 13 | 39 | 27 | 50 | 79 | 74 | 45 | 73 | 66 | 60 | 98 | 91 |
| Nonbelief | 87 | 61 | 73 | 50 | 21 | 26 | 55 | 27 | 34 | 40 | 2 | 9 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 24 | 28 | 52 | 8 | 39 | 47 | 11 | 33 | 44 | 10 | 45 | 55 |

[1]Low retailer credibility

[2]High retailer credibility

TABLE 38. Significance test for retailer credibility effect for all advertisements

Test: One-tailed test for differences in proportions

| Measure | Distribution of Statistic | Statistic[1] $A_1+C_1$ | $B_1+D_1$ | $E_2+G_2$ | $F_2+H_2$ |
|---|---|---|---|---|---|
| Store reference | Z | 3.79* | 2.66* | 3.27* | 3.48* |

* Z (.05, one-tailed) = 1.65

[1]The difference in proportion of nonbelief responses to total responses - low retailer credibility minus high retailer credibility.

Hypothesis Test - Message (Size of Discount) Effect

The influence of the discount size on the credibility of comparative price advertising is reported in this section. The hypothesis tests were confined to the first location advertisements ($A_1$, $B_1$, $C_1$, $D_1$) because the product was controlled. The first test focuses on the influence of message content on regular price credibility. Two measures are employed - store reference and general reference. The second test examines the influence of the discount size on the sale price measure. The two tests were separated because the predicted effects of the discount size were in opposing directions.

1. Message Effect - Regular Price

Null hypothesis: For advertisements with two sizes of discount, the proportion of housewives reporting disbelief in the regular price in comparative price retail advertisements will be equal between two discount sizes.

Alternative hypothesis: For advertisements with two sizes of discount, the proportion of housewives reporting disbelief in the regular price in comparative price retail advertisements will be greater for the large discount size than for the small discount size.

The response distributions for the measures have been reported previously in Table 21. The significance test results are reported in Table 39. The size of discount did have an effect on the proportion of disbelief responses for the Patton's Place advertisements but not for the Simpsons advertisements. When the low message credibility advertisements ($C_1$ and $D_1$) were compared to the high message credibility advertisements ($A_1$ and $B_1$), there was a significant difference in the proportion of disbelief responses. The difference was caused mainly by the Patton's Place advertisements ($A_1$, $C_1$). The results for the two regular price measures would lead to the acceptance of the null hypothesis for Simpsons advertisements and the acceptance of the alternative hypothesis for the advertisements of Patton's Place.

Two interpretations could be made of these results. The first is that a nonexperimental factor associated with Advertisement $D_1$ influenced the results by decreasing the effect of the discount size between Advertisements $B_1$ and $D_1$. As noted in Chapter III, consumers have ranges of acceptable prices for anticipated purchases. Other things being equal, they would be more likely to disbelieve a high quoted regular price than a low quoted regular price. The quoted regular prices of \$400, \$400 and \$370 for Advertisements $A_1$, $B_1$ and $C_1$ respectively were approximately

equivalent. The quoted regular price for Advertisement $D_1$ was $300. If the nonexperimental factor had an effect, it would be that consumers would have been less likely to disbelieve the quoted regular price of Advertisement $D_1$, relative to the other three advertisements. The effect of the size of discount between Advertisements $B_1$ and $D_1$ would be counteracted by the lower quoted regular price of Advertisement $D_1$. If this interpretation was correct, the appropriate test would be between Advertisements $A_1$ and $C_1$ because the regular prices are equivalent. This would lead to the rejection of the null hypothesis and the acceptance of the alternative hypothesis.

TABLE 39. Significance test for discount size effect on regular price measures for the first location advertisements

Test: One-tailed test for differences in proportions for independent samples.

| Measure | Distribution of Statistic | Statistic[1] $A_1 - C_1$ | $B_1 - D_1$ | $A_1 + B_1 - C_1 + D_1$ |
|---|---|---|---|---|
| Store reference | Z | -2.14* | - .67 | -1.98* |
| General reference | Z | -1.83* | .44 | - .98 |

* Z (.05, one-tailed) = 1.65

[1]Direction of difference: first proportion minus second proportion, i.e., $A_1$ minus $C_1$.

The second interpretation is related to the consumers' perceptions of the two stores. Patton's Place was seen as a low credibility source. When consumers received a low credibility message (size of discount of 50 percent) from a low credibility source, which would be consistent with

their perceptions, they would react accordingly. The consumers' perceptions would be confirmed by the low credibility message and 70 percent of the consumers disbelieved the quoted regular price of Advertisement $C_1$ (store reference measure). Simpsons was seen as a high credibility source. When consumers received a low credibility message from a high credibility source, they were placed in an incongruent situation. The result suggests the consumers evaluated the credibility of the regular price on the basis of the store alone and the content of the message was not considered. The proportion of disbelief responses for the two credibility measures was approximately equal for Advertisements $B_1$ and $D_1$. If this interpretation was correct, the alternative hypothesis would be accepted with the following modification. The content of the message influences the credibility of the quoted regular price in comparative price advertising when the message is presented by a low credibility source.

Additional information which could substantiate either interpretation is provided in the consumers' disbelief reasons. The relevant data is highlighted in Table 40. If the first interpretation was correct, the reasons for disbelief of the quoted regular price should show a higher proportion of price-centred reasons for Advertisements A, B and C versus D. The results show the first three advertisements did not elicit a greater proportion of price-centred responses and thus did not support the first interpretation.

TABLE 40. Consumer reasons for disbelief, store reference measure, selected findings (percentages)

| Reasons | A | B | C | D |
|---|---|---|---|---|
| Price too high | 8[1] | 12 | 8 | 15 |
| Price too high for that product | 8 | 6 | 4 | 8 |
| Price reduction too great | 15 | 17 | 34 | 31 |

[1]To be read; eight percent of the respondents who did not believe that the store sold the product for the regular price before the sale thought that the price was too high - Advertisement A.

If the second interpretation was correct, the "price reduction too great" reason should have a higher proportion of responses for Advertisement C than A and should not be different for Advertisements B and D. The proportion of "price reduction too great" reasons for Advertisements A, B, C and D are 15, 17, 34 and 31 respectively. These results show that the different discount sizes were recognized for both stores. The confusing factor was that even though the larger discount size was recognized by the consumers who disbelieved the Simpsons advertisement (D), the low credibility message had no effect on the credibility of the quoted regular price.

The additional information did not substantiate either interpretation. It is also possible that both interpretations are partially true. Recognizing that any explanation was highly judgmental, it was felt the second interpretation was more plausible. Simpsons was a high credibility source and its messages were evaluated by consumers mainly on this factor not on the message content. Accordingly, the change in the message content did not influence the respondents.

The alternative hypothesis was accepted with a modification. Disbelief of comparative price advertising was influenced by the content of the message when the low credibility message was accompanied by a low credibility source. When the message was presented by a high credibility source, the content of the message had no effect on the disbelief of comparative price advertising.

2. Message Effect - Sale Price

The message effect for the sale price measure was separated from the regular price measures because the predicted effects of the discount size were in opposing directions. The prediction for the sale price measure was based mainly on intuition: consumers are more likely to believe the sale price is the best deal in town if the discount size is large rather than small. While the null hypothesis again predicts no difference, the alternative hypothesis was changed.

> Alternative hypothesis: For advertisements with two sizes of discount, the proportion of housewives reporting disbelief in the sale price in comparative price retail advertisements will be greater for the small discount size than for the large discount size.

The results are presented in Table 41. The proportion of disbelief responses was significantly different for the Simpsons advertisements and for the total sample but not for the Patton's Place advertisements at the .05 level. The distribution of responses revealed that Advertisement $A_1$ received a higher proportion of uncertain responses (28 percent) than did Advertisement $C_1$ (12 percent). A $\chi^2$ test (Table 42) shows the distributions were significantly different. The lack of

significance in the proportion test was caused by the high proportion of uncertain responses for Advertisement $A_1$.

TABLE 41. Significance test for discount size effect on the sale price measure for the first location advertisements

Test: One-tailed test for differences in proportions for independent samples.

| Measure | Distribution of Statistic | Statistic[1] $A_1 - C_1$ | $B_1 - D_1$ | $A_1 + B_1 - C_1 + D_1$ |
|---|---|---|---|---|
| Sale price | Z | 1.51** | 3.80* | 4.87* |

* Z (.05, one-tailed) = 1.65
** Z (.10, one-tailed) = 1.30

[1]Direction of difference: first proportion minus second proportion, i.e., $A_1$ minus $C_1$.

TABLE 42. Chi-square test, response distribution, advertisements $A_1$ and $C_1$

Contingency Table

| Response | Advertisement $A_1$ | $C_1$ |
|---|---|---|
| Belief | 43 | 64 |
| Uncertain | 23 | 10 |
| Nonbelief | 17 | 10 |
| TOTAL | 83 | 84 |

Chi-square = 11.05; $\chi^2$(.005, df = 2) = 9.21 (one-tailed)

The results lead to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. The size of the discount in comparative price advertisements influenced the consumers' disbelief in the sale price. A significantly greater proportion of consumers thought a discount size of 25 percent, as opposed to one of 50 percent, was not the best deal in town.

## Shopping Experience Effect

The store profiles for the shoppers and buyers showed that shoppers had a less favorable image of the store than buyers. In particular, Patton's Place shoppers' evaluation of the store was negative relative to the buyers'. The average difference, as reported in Table 43, on the two advertising scales for the Patton's Place shoppers versus buyers was .88 less for the shoppers ($\alpha = .01$). The similar difference for Simpsons shoppers versus buyers was only .39 ($\alpha = .10$), less than half of that for Patton's Place. As a result of this finding, the effect of shopping experience on credibility was tested. The measure used was the store reference measure and differences in the proportion of disbelief responses were calculated for both stores. Because of the relatively low average difference in the advertiser scales between the Simpsons shoppers and buyers, no significant differences were expected for that store.

Because of sample size problems, responses to the advertisements as shown in Table 44 were combined into four groups: $A_1$ and $C_1$, $B_1$ and $D_1$, $E_2$ and $G_2$ and $F_2$ and $H_2$. The results for Patton's Place (Table 45) support the prediction that its shoppers would have a significantly greater proportion of disbelief responses than its buyers. For

Patton's Place, the consumers shopping experience influenced their belief of the regular price credibility. As predicted, there were not significant differences in the proportion of disbelief responses by shopping experience for Simpsons.

TABLE 43. Advertising scale scores, shoppers and buyers, by store and significance test

| | Mean Score | | | |
|---|---|---|---|---|
| | Simpsons | | Patton's Place | |
| Scale | Shoppers | Buyers | Shoppers | Buyers |
| A. Believable advertising | 4.42 | 4.80 | 3.54 | 4.42 |
| B. Reliable advertising | 4.82 | 5.21 | 3.61 | 4.49 |
| C. Average score = (A + B)/2 | 4.62 | 5.01 | 3.58 | 4.46 |
| N = | 82 | 127 | 71 | 123 |

Test for difference in average score, shoppers versus buyers, by store

| | | Statistic | |
|---|---|---|---|
| Measure | Distribution of Statistic | Simpsons | Patton's Place |
| Average score | t | 1.71* | 3.56** |

* $t(.10, df = 60) = 1.66$ (two-tailed)
** $t(.01, df = 60) = 2.62$ (two-tailed)

TABLE 44. Response distribution, store reference measure, by shopping experience, by advertisement (percentages)

| | $A_1$ | | | | $B_1$ | | | | $C_1$ | | | | $D_1$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Response | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T |
| Belief | 28 | 15 | 35 | 29 | 42 | 53 | 56 | 50 | 24 | 9 | 29 | 22 | 28 | 48 | 45 | 41 |
| Uncertain | 31 | 8 | 6 | 17 | 21 | 7 | 6 | 12 | 6 | 13 | 7 | 8 | 28 | 11 | 10 | 16 |
| Nonbelief | 41 | 77 | 59 | 54 | 37 | 40 | 38 | 38 | 70 | 78 | 64 | 70 | 44 | 41 | 45 | 43 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 36 | 13 | 34 | 83 | 33 | 15 | 36 | 84 | 33 | 23 | 28 | 84 | 25 | 27 | 29 | 81 |

| | $E_2$ | | | | $F_2$ | | | | $G_2$ | | | | $H_2$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Response | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T | $\bar{S}$ | S | B | T |
| Belief | 13 | 5 | 18 | 13 | 35 | 56 | 65 | 50 | 59 | 31 | 64 | 55 | 71 | 71 | 90 | 78 |
| Uncertain | 37 | 5 | 18 | 22 | 35 | 19 | 10 | 23 | 21 | 19 | 11 | 17 | 11 | 13 | 6 | 10 |
| Nonbelief | 50 | 90 | 64 | 65 | 30 | 25 | 25 | 27 | 20 | 50 | 25 | 28 | 18 | 16 | 4 | 12 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 30 | 19 | 33 | 82 | 37 | 16 | 31 | 84 | 39 | 13 | 28 | 83 | 28 | 24 | 31 | 83 |

Key: $\bar{S}$ = Nonshoppers
S = Shoppers
B = Buyers
T = Total

TABLE 45. Significance test for shopping experience effect on the store reference measure for all advertisements

Test: One-tailed test for differences in proportions for independent samples.

| | | Statistic[1] | | | |
|---|---|---|---|---|---|
| | | Patton's Place | | Simpsons | |
| Measure | Distribution of Statistic | $A_1+C_1$ | $E_2+G_2$ | $B_1+D_1$ | $F_2+H_2$ |
| Store reference | Z | 1.68* | 2.42* | -.11 | .73 |

* Z (.05, one-tailed) = 1.65

[1]The difference in proportion of nonbelief responses to total responses - shoppers minus buyers.

## Disbelief Reasons

This section reports on the reasons given for disbelieving the prices contained in the advertisements. The distribution of responses for the three measures appear in Tables 46, 47 and 48. The responses to all advertisements are included (e.g. $A_3$, $B_3$, etc.). Also included are replies from some consumers who had an uncertain response but answered the question. All responses were counted because the objective was a greater understanding of consumer disbelief of comparative price advertising. The findings will be discussed in three parts:

a) An overview of the reasons for consumer disbelief of comparative price advertising.

b) The effect of the store on the disbelief reasons.

c) The effect of the message content on the disbelief reasons.

TABLE 46. Consumer reasons for disbelief, store reference measure, by advertisement (percentages)

| Reasons | Advertisement A | B | C | D | E | F | G | H | Total | Patton's Place Adv. | Simpsons Adv. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Price-centred | | | | | | | | | | | |
| Price too high | 8 | 12 | 8 | 15 | 46 | 17 | 18 | 30 | 16 | 17 | 15 |
| Price too high for that product | 8 | 6 | 4 | 8 | 17 | 9 | 9 | 30 | 8 | 8 | 9 |
| Price reduction too great | 15 | 17 | 34 | 31 | 19 | 22 | -- | -- | 23 | 23 | 22 |
| Price should be higher | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Prices don't vary | 4 | 2 | 1 | -- | -- | -- | 9 | 10 | 2 | 2 | 2 |
| Shopper-centred | | | | | | | | | | | |
| I can do better | 1 | 2 | 2 | -- | 4 | -- | -- | -- | 1 | 2 | 1 |
| Product-centred | | | | | | | | | | | |
| Have to see it to believe it | 3 | 8 | 4 | -- | -- | -- | -- | 10 | 3 | 2 | 3 |
| Something wrong with the product | 9 | 13 | 6 | 14 | 2 | 13 | -- | -- | 8 | 6 | 12 |
| Store-centred | | | | | | | | | | | |
| Store too expensive | -- | 2 | 2 | -- | -- | -- | -- | -- | 1 | -- | 1 |
| Distrust store | 3 | 2 | -- | 2 | -- | -- | -- | -- | 1 | 1 | 1 |
| Distrust store's advertising | 7 | 2 | 5 | 2 | 2 | 4 | -- | -- | 3 | 4 | 2 |
| Price-advertising centred | | | | | | | | | | | |
| Distrust sales | 37 | 32 | 30 | 24 | 10 | 35 | 59 | 10 | 31 | 32 | 28 |
| Unclassifiable | 4 | 2 | 4 | 4 | -- | -- | 5 | 10 | 3 | 3 | 4 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 74 | 52 | 108 | 59 | 54 | 23 | 22 | 10 | 402 | 257 | 145 |

NOTE: Data obtained from responses to all advertisements. Data includes respondents who answered "Don't Know" to the store reference measure and answered "Why" question.

TABLE 47. Consumer reasons for disbelief, general reference measure, by advertisement (percentages)

| Reasons | Advertisement A | B | C | D | E | F | G | H | Total | Patton's Place Adv. | Simpsons Adv. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Price-centred | | | | | | | | | | | |
| Price too high | 22 | 10 | 24 | 17 | 51 | 24 | 19 | 22 | 23 | 29 | 16 |
| Price too high for that product | 9 | 5 | 8 | 7 | 23 | 7 | 4 | 11 | 9 | 11 | 7 |
| Price reduction too great | -- | 3 | 6 | 3 | 2 | 3 | -- | -- | 3 | 3 | 3 |
| Price should be higher | 5 | -- | 4 | 3 | 2 | -- | 12 | -- | 3 | 5 | 1 |
| Prices don't vary | -- | -- | 3 | 3 | -- | -- | -- | 6 | 2 | 2 | 1 |
| Shopper-centred | | | | | | | | | | | |
| I can do better | 36 | 39 | 25 | 44 | 17 | 34 | 42 | 28 | 33 | 27 | 39 |
| Product-centred | | | | | | | | | | | |
| Have to see it to believe it | -- | 2 | 1 | -- | -- | -- | -- | -- | -- | -- | 1 |
| Something wrong with the product | -- | 3 | 3 | -- | -- | -- | -- | -- | -- | 1 | 1 |
| Store-centred | | | | | | | | | | | |
| Store too expensive | -- | 21 | 5 | 17 | -- | 17 | 4 | 33 | 11 | 2 | 20 |
| Distrust store | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Distrust store's advertising | 4 | -- | 1 | -- | -- | -- | -- | -- | 1 | 2 | -- |
| Price-advertising centred | | | | | | | | | | | |
| Distrust sales | 24 | 13 | 18 | 5 | 2 | 15 | 19 | -- | 13 | 16 | 9 |
| Unclassifiable | -- | -- | 3 | 3 | -- | -- | -- | 6 | 2 | 2 | 2 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 55 | 62 | 80 | 72 | 47 | 29 | 26 | 18 | 389 | 208 | 181 |

NOTE: Data obtained from responses to all advertisements. Data includes respondents who answered "Don't Know" to the general reference measure and answered "Why" question.

TABLE 48. Consumer reasons for disbelief, sale price measure, by advertisement (percentages)

| Reasons | Advertisement A | B | C | D | E | F | G | H | Total | Patton's Place Adv. | Simpsons Adv. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Price-centred | | | | | | | | | | | |
| Price too high | 2 | 2 | -- | -- | 15 | -- | 5 | 4 | 3 | 5 | 2 |
| Price too high for that product | -- | 2 | -- | -- | 8 | -- | 5 | 8 | 2 | 2 | 3 |
| Price reduction too great | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Price should be higher | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Prices don't vary | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Shopper-centred | | | | | | | | | | | |
| I can do better | 88 | 70 | 88 | 56 | 62 | 79 | 82 | 68 | 76 | 83 | 69 |
| Product-centred | | | | | | | | | | | |
| Have to see it to believe it | 5 | 2 | -- | -- | -- | -- | -- | 4 | 2 | 2 | 2 |
| Something wrong with the product | -- | -- | 6 | -- | -- | -- | -- | -- | -- | 1 | -- |
| Store-centred | | | | | | | | | | | |
| Store too expensive | -- | 23 | -- | 38 | -- | 11 | 4 | 16 | 13 | 1 | 22 |
| Distrust store | -- | -- | 6 | -- | -- | -- | -- | -- | -- | 1 | -- |
| Distrust store's advertising | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Price-advertising centred | | | | | | | | | | | |
| Distrust sales | -- | -- | -- | -- | -- | -- | 4 | -- | -- | 1 | -- |
| Unclassifiable | 5 | -- | -- | 6 | 15 | 10 | -- | -- | 4 | 4 | 2 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| N = | 42 | 56 | 16 | 16 | 13 | 19 | 22 | 25 | 209 | 93 | 116 |

NOTE: Data obtained from responses to all advertisements. Data includes respondents who answered "Don't Know" to the sale price measure and answered "Why" question.

The most frequent reason for disbelief to the store reference measure (Table 46) was a general distrust of sales. Overall, 31 percent of the responses were for this reason. Many consumers did not believe the quoted regular price in comparative price advertising because they didn't believe in sales. The second most frequent reason given was that the price reduction was too great. It is interesting to note that no one gave this reason for the lowest discount size (11 percent). Consumers were willing to accept certain sizes of discounts but when a store offered products at 25 percent or more off the regular price, the consumers didn't believe the quoted regular price. The absolute price level was the other major reason for disbelief. Twenty-four percent of the disbelief reasons were because the price was "too high" or "too high for the product".

The disbelief reasons to the general reference measure appear in Table 47. The most frequent reason was "I can do better". This reason reflected the consumer's self-image as a shopper. She was unwilling to accept the quoted regular price as the usual price in town because she thought, because of her ability as a shopper, she could have purchased the product at a lower price. The price-centred reasons again received a high proportion of the total responses. Thirty-two percent of the consumers felt the quoted regular price was "too high" or "too high for the product". "Distrust of sales" (13 percent) and "too expensive a store" (11 percent) accounted for most of the remaining responses.

The disbelief reasons to the store reference measure were approximately equal between the stores. There were some differences

by advertisement (A - B, C - D, E - F, G - H), the major difference being between Advertisements E - F. Sixty-three percent of the reasons for disbelief for Advertisement E were because the price was too high or too high for the product whereas only 26 percent gave the same reason for Advertisement F. The consumers reacted to the difference in the quoted regular prices between the two advertisements: Advertisement E had a quoted regular price of $520 and Advertisement F had a quoted regular price of $340. An interesting finding was the difference between stores for the "distrust sales" reason. Excluding Advertisements E and F, where the differences were accounted for by the product price levels, the remaining three pairs of advertisements showed that Patton's Place received higher percentages for the "distrust sales" reason than did Simpsons. The results for the general reference measure followed the same pattern. The findings suggest the reason was store-linked. That is, Patton's Place, the low credibility source, was more likely to receive a general distrust in sales reason for disbelief than was Simpsons, the high credibility source.

The major difference between the stores on the general reference measure was the "store is too expensive" reason. Twenty percent of the disbelief responses to Simpsons advertisements gave this reason, as opposed to only two percent for Patton's Place. Simpsons was seen as a high priced store and, because of this many consumers thought the quoted regular price at Simpsons was not the usual price in town. The results for the sale price measure showed 22 percent of consumers who viewed Simpsons advertisements thought the sale price not the best price in town because the store was too expensive. Only one percent gave the

same reason for Patton's Place advertisements.

The effect of the message content (size of discount) was shown by the number of responses to the "price reduction too great" reason for the store reference measure. When the discount size was 25 percent (Advertisements A and B) approximately 16 percent of the consumers said the "price reduction was too great". At 50 percent off (Advertisements C and D) approximately 33 percent gave the same reason. Twice as many consumers disbelieved the larger discount size because the "price reduction was too great".

## Summary to Chapter VI

The hypothesis test results revealed that the credibility of comparative price advertisements was not related to social class unless the advertisement contained a class-biased product. With the class-biased product present, the source and message did not appear to influence the affected social class respondents. The results showed that the store (source) affected message acceptance. Patton's Place, the low credibility store, received a greater proportion of disbelief responses for its statements than did Simpsons, the high credibility store. It was also found the price competitiveness of the store, an image component, was related to belief in the sale price as being the best deal in town.

The message content (discount size) influenced belief in the regular price when a low credibility message was presented by a low credibility source. When the message was presented by a high credibility source, the message content did not affect belief of the regular price.

With the sale price measure, the larger discount size led to a greater belief that the sale price was the best deal in town. Credibility was also related to shopping experience for Patton's Place.

Two of the main reasons why consumers did not believe the regular price were: a general distrust of sales and the belief that Simpsons was too expensive. The "general distrust of sales" reason was an indication that many people who did not believe the regular price were critical of advertising.

The following chapter investigates the combined effects of the independent variables through the use of regression analysis. This analysis provides the means for examining the combined effects and obtaining a clearer picture of the two stores' image components - retailer credibility and price competitiveness.

# CHAPTER VII

## REGRESSION MODELS

The objective of this chapter is to examine the combined influence of the independent variables on the credibility of comparative price advertisements. The analysis in the previous chapter revealed that the store, size of discount and shopping experience of the consumer separately influenced the credibility of comparative price advertisements. By means of multiple regression analysis, the combined effects of these variables will now be explored. The analysis and discussion provides a more complete understanding of the joint effects of the independent variables on credibility.

The analysis was restricted to the first location advertisements ($A_1$, $B_1$, $C_1$, $D_1$) because the product was controlled. The structure of the multiple regression model involved a zero-one code for the dependent variable. A belief response was coded one; a nonbelief response, zero. The uncertain responses were removed from the analysis.[1] The results can be interpreted to estimate the conditional probability of a belief response given the independent variable measures.[2] Dummy

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[1] As a preliminary step, three multiple regression runs were performed on the store reference measure: with the uncertain responses removed, with the uncertain responses coded zero and with the uncertain responses coded one. The relative effects of the independent variable were unchanged in a comparison of the three results.

[2] J. Johnston, Econometric Methods, (New York; McGraw-Hill Company, 1963), p. 224.

variables (zero-one code) were used for the independent variables. When a regression analysis employing dummy variables is run, the least-squares coefficients are simply the cell means for the independent variables.[3] The dummy variable approach can also incorporate interaction effects and therefore it is unnecessary to assume additivity in the model.

Sequential analysis was performed for the store reference measure and sale price measure. The sequence involved testing combinations of the independent variables (store, size of discount, social class, shopping experience) and all interaction terms. The objective was to determine which independent variables discriminated between belief and nonbelief responses. The criterion for retaining any independent variable was the significance level (in most cases .05) for the variable coefficient.

Regression Model - Store Reference Measure

The first regression models were formulated to test the influence of social class to ensure this variable was not a determinant of credibility. The formulation and results of these models, presented in Table 49, support the findings reported in Chapter VI. Social class membership does not influence belief in retailer statements regarding the regular price.

Further regression models were run to explore the effects of store, discount size, shopping experience and the interaction terms between these variables. The model that offered the highest degree of discrimination between the independent variables is presented in Table 50.

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[3]Ibid., p. 227.

TABLE 49. Regression model, store reference measure, test for social class effect

---

Store is 1 if Simpsons advertisement; Ø otherwise
Size is 1 if 25 percent off advertisement; Ø otherwise
Work C is 1 if respondent is Working Class; Ø otherwise
Midd C is 1 if respondent is Middle Class; Ø otherwise
Not S is 1 if the respondent is a Nonshopper; Ø otherwise
Shop is 1 if the respondent is a Shopper; Ø otherwise

P(belief) is the probability of a respondent believing the stores' statements regarding the regular price.

Result for Test 1

$$P(\text{belief}) = \beta_1 + \beta_2\ \text{Store} + \beta_3\ \text{Size} + \beta_4\ \text{Work C} + \beta_5\ \text{Midd C}$$

$$P(\text{belief}) = .41 + .23\ \text{Store}^{b} + .10\ \text{Size}^{b} + .06\ \text{Work C} - .02\ \text{Midd C} \qquad R^2 = .08 \qquad N = 288$$
$$(.056)^{a} \qquad (.056) \qquad (.068) \qquad (.073)$$

Result for Test 2

$$P(\text{belief}) = \beta_1 + \beta_2\ \text{Not S} + \beta_3\ \text{Shop} + \beta_4\ \text{Work C} + \beta_5\ \text{Midd C}$$

$$P(\text{belief}) = .56 + .04\ \text{Not S} + .09\ \text{Shop} + .04\ \text{Work C} - .06\ \text{Midd C} \qquad R^2 = .01 \qquad N = 288$$
$$(.069)^{a} \qquad (.074) \qquad (.072) \qquad (.075)$$

[a]Standard error

[b]$p < .05$

TABLE 50. Regression model, store reference measure, final model

---

$P(\text{belief}) = \beta_1 + \beta_2\ \text{Store} + \beta_3\ \text{Size} + \beta_4\ \text{Patton's Place Shoppers}$

where:

P(belief) is the probability of a respondent believing the store's statements regarding the regular price.

Store is 1 if it is a Simpsons advertisement; Ø otherwise
Size is 1 if it is a 25 percent off advertisement; Ø otherwise
Patton's Place Shopper is 1 if it is a Patton's Place Shopper; Ø otherwise

Result

$$P(\text{belief}) = .29 + .19\ \text{Store}^{b} + .09\ \text{Size}^{c} - .20\ \text{Patton's Place Shopper}^{b} \qquad R^2 = .08 \qquad N = 288$$
$$\qquad\qquad\qquad\quad (.060)^{a} \qquad\quad (.056) \qquad\quad (.095)$$

[a]Standard error
[b]$p < .05$
[c]$p < .07$

Probability of Belief given...

| | |
|---|---|
| Simpsons, 25 percent off | = .57 |
| Simpsons, 50 percent off | = .48 |
| Patton's Place, 25 percent off, Nonshopper or Buyer | = .38 |
| Patton's Place, 25 percent off, Shopper | = .18 |
| Patton's Place, 50 percent off, Nonshopper or Buyer | = .29 |
| Patton's Place, 50 percent off, Shopper | = .09 |

Two coefficients were significant at the .05 level and the third at the .07 level.

Although the coefficient of determination ($R^2$) was low, it is not the important measure. In this case, the coefficient of determination is a measure of the degree to which individual behavior can be explained, given a set of independent variables. What is of interest, however, is the difference in belief between "groups", not individuals, where groups are defined as respondents who have received a particular stimulus or who belong to a particular class, e.g. shoppers. The results of the models should be interpreted in terms of group means.[4]

The important measure is the degree of difference in the probability of belief, given the independent variables. By this criterion store, discount size and shopping experience at Patton's Place contributed significantly to explaining differences in probability of belief in the store's statements regarding the regular price. The probabilities ranged from .09 to .57 reflecting the combined effects of the three variables. The store changes the probability of belief by .19. As shown in Table 50, the probability of a consumer believing the store's statements was .19 higher for Simpsons than for Patton's Place. The discount size changed the probability by an additional .09. If the consumer was a Patton's Place shopper, the probability of belief decreased by .20.

The regression coefficients indicated the relative importance of each independent variable in influencing the credibility of the store's

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[4]Frank M. Bass, Douglas J. Tigert, and Ronald T. Lonsdale, "Market Segmentation: Group Versus Individual Behavior", Journal of Marketing Research, V, (August, 1968), 264-70.

statements. The results, as expected, confirmed the hypotheses tests. In addition, they revealed the joint effects of the independent variables. For example, the joint effect of store and discount size change the probability of belief by .28: the sum of the regression coefficients for the two independent variables.

Regression Model - Sale Price Measure

A series of multiple regressions were run employing the sale price measure as the dependent variable. The model offering the greatest degree of discrimination between the independent variables is reported in Table 51. Again, the model confirmed the previous results.

Store, discount size and store-size interaction terms significantly influenced the probability of belief that the sale price was the lowest price in town. These results provide an interesting comparison with those obtained using the store reference measure as the dependent variable.

First, the factors which increased the probability of belief in the store's statements (store reference measure) decreased the probability of belief in the sale price being the lowest price in town. Simpsons obtained a higher probability of belief than Patton's Place for the store reference measure and a lower probability of belief for the sale price measure. The discount size of 25 percent off increased belief for the store reference measure and decreased belief for the sale price measure.

The explanation for these results lies in the multidimensional image of the stores and the focus of the two credibility measures.

TABLE 51. Regression model, sale price measure, final model

$$P(\text{belief}) = \beta_1 + \beta_2\ \text{Store} + \beta_3\ \text{Size} + \beta_4\ \text{Store-Size}$$

where:

P(belief) is the probability of a respondent believing that the sale price is the lowest price in town.

Store is 1 if it is a Simpsons advertisement; Ø otherwise
Size is 1 if it is a 25 percent off advertisement; Ø otherwise
Store-Size is 1 if it is a Patton's Place - 50 percent off advertisement; Ø otherwise

Result

$$P(\text{belief}) = 1.06 - .20\ \text{Store}^{b} - .34\ \text{Size}^{b} - .19\ \text{Store-Size}^{b} \qquad R^2 = .11 \qquad N = 269$$
$$(.074)^{a} \qquad (.072) \qquad (.102)$$

[a]Standard error
[b]$p < .05$

Probability of Belief given...

| | |
|---|---|
| Simpsons, 25 percent off | = .52 |
| Simpsons, 50 percent off | = .86 |
| Patton's Place, 25 percent off | = .72 |
| Patton's Place, 50 percent off | = .87 |

Patton's Place was seen as a low credibility source and a competitively priced store. Simpsons was seen as a high credibility source and non-competitively priced, relative to Patton's Place. The store reference measure evoked a response based on the credibility of the source and Patton's Place received a significantly lower proportion of belief responses, relative to Simpsons. In addition, the message content (discount size) was viewed on the credibility dimension. Belief in the store's statements was lowered if the credibility of the message content was low (50 percent off). However, the sale price measure evoked the second dimension of the source - the perceived price level of the store relative to other stores. The consumer's evaluation of the stores was now reversed. Patton's Place, relative to Simpsons, received a significantly greater proportion of belief responses because it was viewed as a competitively priced store. The influence of the message content was also reversed. The larger discount size (50 percent off versus 25 percent off) increased the belief that the sale price was the best in town.

The reversal might best be explained by an example of a consumer's reaction to the regular and sale price. The reaction to the regular price was: "Nobody sells things for 50 percent off"; to the sale price it might have been: "I don't believe that 50 percent off, it's probably only 30 percent off, but that still makes it the best deal in town". With the large discount size, a consumer could reduce the size of discount, i.e. have calculated a perceived discount and still think a substantial saving was being offered.

The second interesting comparison is the relative importance of the independent variables (as measured by the coefficients) between the two credibility measures. For the sale price measure, discount size was the most important variable in influencing the probability of belief. This was in contrast to the store reference measure where the store was the most important variable.

The explanation for this result again lies partly in the focus of the two credibility measures and partly in the model results. The sale price measure regression model had a significant interaction variable (store-size) which was not present in the store reference measure regression model. The absence of the interaction variable for the store reference model can be interpreted to mean that the effects on credibility of the store and discount size were additive. The probability of belief was a function of the store plus the discount size.

With the sale price measure, the presence of the interaction term (store-size) revealed that the store and discount size effects were not additive. This can be seen by examining the probability of belief conditions. The difference in probability of belief for Patton's Place between the two discount levels is .15. A 50 percent off advertisement increases the probability of belief by only .15. The corresponding difference for Simpsons between the two discount levels is .34 or more than twice the effect achieved by the Patton's Place advertisement. The interpretation is that Patton's Place, at a discount level of 25 percent off, has already achieved a very high probability of belief (.72). At the same discount level, Simpsons has not achieved a high probability of belief (.52). At the large discount size level (50 per-

cent off), Simpsons achieved a greater change in the probability of belief because of their low belief at the discount level of 25 percent off. In other words, most consumers believed the sale price was the best deal in town when the discount size was 50 percent off. When the discount size was 25 percent off, the perceived price level of the store was a major determinant of the probability of belief.

# CHAPTER VIII

## SUMMARY AND IMPLICATIONS

This chapter is composed of five main sections. The first summarizes the empirical results of the research. The second reports the theoretical implications of the findings. The next two discuss the implications of the results for government and retailers. The final section suggests some further avenues for related research.

### Summary

The research objectives were to examine the extent of consumer belief of comparative price retail advertisements, and factors which influence this belief. The credibility of comparative price advertisements was operationally defined as a respondent's belief that:

a) The quoted regular price was the price the store sold the product for prior to the sale.

b) The quoted regular price was the price people would usually have to pay for the product at other stores.

c) The quoted sale price was the lowest price for the product in town.

The three questions are referred to as the store reference measure, general reference measure and sale price measure respectively.

The background review of communication credibility provided the potential variables which might influence comparative price

advertisement credibility. The variables were evaluated and three were selected for the research design. It was hypothesized that the credibility of a comparative price advertisement was a function of the retailer, size of discount and the respondent's social class. Preliminary analysis indicated, in certain cases, shopping experience at the store might be related to credibility.

The effect of the independent variables was tested by an experimental design. Incorporated into a survey questionnaire, the design consisted of different sets of three comparative price advertisements which had appeared in the local daily newspaper. The effects of retailer and size of discount were determined by the selected advertisements. Three products were included so that any findings could be generalized beyond one product category. Information required to test the effect of social class and shopping experience was obtained in the questionnaire.

Through a field survey, data was collected from 332 homemakers in London, Ontario. Homemakers were chosen because, as a class of consumers, they are significant. In addition, the data collection costs were significantly reduced. Comparison of the sample's income distribution with that of the populations of Ontario and Canada indicated it was probably biased upwards relative to the larger populations. The bias was not considered serious in any projection of the findings.

In the survey procedure, the subjects were requested to imagine the advertisements had appeared in that evening's newspaper. They were then shown the advertisements and questioned about the quoted regular and sale price. Other questions ascertained the subject's evaluation

of the stores, their shopping experience at the stores and their socio-economic characteristics.

Preliminary investigation of the data indicated a need for modification of the proposed analysis. The third location advertisement was omitted from further analysis because of fatigue effect (caused by the questionnaire structure), which decreased the likelihood of a negative response to the dependent variable questions for the third location advertisement. The effect was serious enough to cause a significant difference in the proportion of negative responses to the store reference measure. However, the data obtained on the first and second location advertisements was sufficient for accomplishing the objectives of the research.

Examination of the store profile data showed that subjects who had not shopped at the store had a higher proportion of neutral responses to the scales than either shoppers or buyers. It was concluded many of the nonshoppers were checking the neutral category because they did not have an image of the store, and they were removed from the store profile analysis. Of the eight scales employed, one was removed from further analysis because it was considered a poor measure.

The data analysis was conducted in three stages. The first stage reported the total results across the first and second location advertisements for the credibility measures. These findings revealed the extent of consumer belief of comparative price retail advertisements.

1. First Stage Analysis

A summary of the first stage findings is presented in Table 52.

TABLE 52. Response distributions, summary, credibility measures (percentages)

| Response | Store Reference Measure | General Reference Measure | Regular Price Credibility | Sale Price Measure |
|---|---|---|---|---|
| **First Location Advertisements** | | | | |
| Belief | 35 | 36 | 30 | 60 |
| Uncertain | 13 | 23 | 9 | 19 |
| Nonbelief | 52 | 41 | 61 | 21 |
| TOTAL | 100 | 100 | 100 | 100 |
| **Second Location Advertisements** | | | | |
| Belief | 49 | 40 | 43 | 52 |
| Uncertain | 18 | 26 | 15 | 25 |
| Nonbelief | 33 | 34 | 42 | 23 |
| TOTAL | 100 | 100 | 100 | 100 |
| **All Advertisements** | | | | |
| Belief | 42 | 38 | 36 | 56 |
| Uncertain | 16 | 24 | 12 | 22 |
| Nonbelief | 42 | 38 | 52 | 22 |
| TOTAL | 100 | 100 | 100 | 100 |

N = 332

Only a minority of consumers believed the store and/or other stores usually sold the advertised product for the quoted regular price - 36 percent for all advertisements. The majority of consumers did not believe the quoted regular price.

An approximate idea of the extent of disbelief in the quoted regular price was provided by the perceived discount size. The average stated discount for the eight advertisements was 38 percent. The average perceived discount was only 20 percent off for the consumers who disbelieved the quoted regular price. That is, the consumers who did not believe the quoted regular price thought the usual discount was approximately one-half the quoted discount. For the two advertisements with the smallest discount size, 11 percent off, the consumers who disbelieved the quoted regular price actually thought the usual selling price was below the quoted sale price.

The impact of the advertisements was determined by the sale price measure. All things considered, did the consumer think the sale price for the product was the lowest price in town? A majority of consumers thought it was - 56 percent for all advertisements. This was rather surprising, considering a majority of consumers did not believe the quoted regular price. Disbelief of the quoted regular price did not necessarily lead to disbelief in the quoted sale price. In fact, the probability of belief that the sale price was the lowest in town, given disbelief in the regular price, was .58.[1] The probability of belief that

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[1] From Table 25 - First Location Advertisements.

the sale price was the lowest price in town given belief in the regular price, was .75. These results indicate that, while belief in the regular price did influence the probability of belief in the sale price, it was not the only influence. Factors other than belief/disbelief in the quoted regular price influenced a subject's response to the sale price measure. One factor was the perceived price level of the store. The consumer may have believed the sale price was the lowest in town because she thought the store usually had low prices. Also, she may have disbelieved the regular price, calculated what she believed the usual selling price was, and then felt the perceived saving was sufficiently high to think the sale price was the best deal.

In summary, consumer willingness to accept the quoted regular price was low - 36 percent for the advertisements. The consumers appeared to be highly suspicious of the advertised price claims made by the selected retailers. When they were asked if the sale price was the lowest price, a relatively high proportion believed it was - 56 percent for the advertisements.

2. Second Stage Analysis

The second analysis stage tested the hypotheses. The proportion test was the main analytic technique employed to ascertain if the retailer, discount size, consumer's social class and shopping experience influenced the credibility of comparative price advertisements.

The investigation revealed that credibility of comparative price advertisements was not related to social class, except when the advertisement contained a class-biased product. In this case, the

product was a dishwasher which is one not normally purchased by the working class. The effect was a greater proportion of uncertain responses by these respondents and an inability or unwillingness to discriminate between the other stimuli - store and size of discount.

The summary analysis for the social class proportions tests is presented in Table 53. The sign direction for the statistic (Z) reveals the proportion of belief/disbelief responses by social class varied across the advertisements and across the measures. This response pattern, with no one of the three groups having a predominantly higher proportion of belief/disbelief responses, supported the acceptance of the null hypothesis. Social class membership did not appear to be a factor in the credibility of comparative price advertisements.

The effect of the store on the credibility of comparative price advertisements was investigated by comparing the response distributions to "matched" advertisements from the two stores. The store profile analysis had shown that Simpsons was seen to have more reliable and more believable advertising than Patton's Place. The store reference measure was employed because it focused on belief in the stores' statements regarding the regular price. The tests, presented in Table 36, showed the proportion of consumers who disbelieved the stores' statements was significantly higher for the "low source credibility" store, Patton's Place, than for the "high source credibility" store, Simpsons. Consumer acceptance of the message was dependent on the store. This was a validation of source credibility theory within the retailer-consumer framework.

The additional dimension, relative store price level, was incorporated into the two remaining credibility measures - general

TABLE 53. Summary statistics, social class

Test: Two-tailed test for differences in proportions for independent samples.

| Comparison | Measure | Distribution of Statistic | Statistic: First Location Advertisements $A_1$ | $B_1$ | $C_1$ | $D_1$ | Second Location Advertisements $E_2$ | $F_2$ | $G_2$ | $H_2$ |
|---|---|---|---|---|---|---|---|---|---|---|
| Working Class - Middle Class[1] | Store reference | Z | -.29 | .69 | - .25 | 1.83* | -2.29* | 1.00 | -.83 | .35** |
| | General reference | Z | -.47 | 1.77* | - .50 | .93 | - .48 | 2.04* | .55 | -1.42** |
| | Sale price[2] | Z | -.09 | - .74 | .34 | .47 | - .28 | -1.75* | 1.23 | - .11 |
| Working Class- Middle, Upper Class | Store reference | Z | -.46 | .34 | .18 | .48 | - .64 | 1.20 | -.41 | - .25** |
| | General reference | Z | .02 | .41 | - .51 | .36 | -1.02 | 2.01* | 1.46** | - .98** |
| | Sale price | Z | -.68 | .78 | -1.16** | 1.34 | - .92 | -2.27* | .66 | - .12 |
| Middle Class- Middle, Upper Class | Store reference | Z | -.11 | - .29 | .42 | -1.13 | 1.35 | .11 | .34 | - .56** |
| | General reference | Z | .47 | -1.21 | .00 | - .47 | - .64 | - .19 | .90** | .48 |
| | Sale price | Z | -.47 | 1.47 | -1.46** | .78 | - .69 | - .38 | -.48 | .00 |

* Z (.10, two-tailed) = 1.65
**Np or Nq < 5

[1]The difference in proportion of nonbelief responses to total responses - working class minus middle class.

[2]The difference in proportion for the sale price measure is based on the proportion of belief responses to total responses.

reference and sale price. In the comparison on the sale price measure, the effect was evident. Simpsons received a higher proportion of disbelief responses to the sale price measure than did Patton's Place. The competitive price image achieved by Patton's Place led to a greater acceptance of its sale price being the lowest price in town.

The effect of retailer credibility of comparative price advertisements was also examined. Advertising scales for the two stores were employed to categorize the respondents - those with a favorable or unfavorable retailer credibility image. The "unfavorable" consumers had a significantly greater proportion of disbelief responses on the store reference measure than did the "favorable", regardless of store. Consumer willingness to accept the store's statements regarding the regular price was dependent upon her evaluation of the retailer's credibility.

The effect of the discount size (message content) on the credibility of comparative price advertisements was examined by a comparison of advertisements, with different discount sizes, from the same store. With regard to the regular price, analysis indicated the discount size was a factor for Patton's Place advertisements only. Disbelief of the quoted regular price was influenced by message content when a low credibility message was accompanied by a low credibility source. When the message was presented by a high credibility source, message content did not affect disbelief of the quoted regular price.

Results for the sale price measure again revealed the effect of the price dimension. The discount size in comparative price advertisements influenced consumers' disbelief of the sale price. A significantly

greater proportion thought a discount size of 25 percent off, as opposed to 50 percent, was not the lowest price in town.

The store profile analysis indicated that Patton's Place shoppers had a very unfavorable image of the store. This led to the investigation of the effects of shopping experience on credibility. It was found the proportion of consumers who disbelieved the store's statement regarding the regular price was significantly greater for Patton's Place shoppers than for its buyers. No significant differences were found between Simpsons shoppers and buyers. Consumers who had shopped but not bought at Patton's Place were more likely to disbelieve the store's statements than consumers who had bought there.

To summarize, the investigation suggested that the credibility of comparative price advertisements was not influenced by social class unless the advertisement contained a class-biased product. The credibility of the stores' statements was influenced by the store. Consumer acceptance of statements by the "low credibility" store was significantly lower than acceptance of those by the "high credibility" store. The perceived relative price level of the store, a second store dimension, influenced the consumer's acceptance of the sale price as being the lowest in town. The investigation of message content effects (size of discount) again supported the dual store dimension concept. Consumer disbelief of the regular price was significantly greater when the low credibility message (50 percent off) was accompanied by the low credibility store. Belief in the sale price was significantly higher for the large discount size (50 percent off) than for the small discount size (25 percent). Finally, the investigation revealed that shopping experience of a specific group,

Patton's Place shoppers, influenced their acceptance of the store's statements.

3. Third Stage Analysis

The third analysis stage examined the combined effects of the independent variables on the credibility of comparative price advertisements. Multivariate regression models employing dummy variables were used to probe the relationships. Separate analysis was conducted on two dependent variables - store reference and sale price measures. The models which had the greatest discrimination between the dependent variable categories (belief, nonbelief) are presented in Table 54. These results confirm the second stage analysis and show the combined effects of the independent variables. The two measure comparison revealed the multidimensional store image effects. The "high credibility" store, Simpsons, accompanied by the high credibility message, 25 percent off, received the highest probability of belief for the stores' statements (.57). The probability of belief that the sale price was the best deal was highest for the "quite competitive prices" store, Patton's Place, and for the largest discount size, 50 percent off (.87). It was concluded that consumer belief in the stores' statements was related to the credibility dimension - the trustworthiness of the store advertising and message content credibility. Consumer belief in the sale price was related to the relative price level dimension - the price competitiveness of the store and relative discount size.

It should be noted that the sale price measure regression analysis revealed that no significant differences existed between the

TABLE 54. Regression models, store reference measure and sale price measure

Store reference regression model

$P(\text{belief}) = \beta_1 + \beta_2 \text{ Store} + \beta_3 \text{ Size} + \beta_4 \text{ Patton's Place Shoppers}$

where:

P(belief) is the probability of a respondent believing the store's statements regarding the regular price.

Store is 1 if it is a Simpsons advertisement; Ø otherwise
Size is 1 if it is a 25 percent off advertisement; Ø otherwise
Patton's Place Shopper is 1 if it is a Patton's Place Shopper; Ø otherwise

Result

$P(\text{belief}) = .29 + .19 \text{ Store}^b + .09 \text{ Size}^c - .20 \text{ Patton's Place Shopper}^b \qquad R^2 = .08 \qquad N = 288$

$(.060)^a \qquad (.056) \qquad (.095)$

[a]Standard error
[b]$p < .05$
[c]$p < .07$

Probability of Belief given...

| | |
|---|---|
| Simpsons, 25 percent off | = .57 |
| Simpsons, 50 percent off | = .48 |
| Patton's Place, 25 percent off, Nonshopper or Buyer | = .38 |
| Patton's Place, 25 percent off, Shopper | = .18 |
| Patton's Place, 50 percent off, Nonshopper or Buyer | = .29 |
| Patton's Place, 50 percent off, Shopper | = .09 |

Sale price regression model

$P(\text{belief}) = \beta_1 + \beta_2 \text{ Store} + \beta_3 \text{ Size} + \beta_4 \text{ Store-Size}$

where:

P(belief) is the probability of a respondent believing that the sale price is the lowest price in town.

Store is 1 if it is a Simpsons advertisement; Ø otherwise
Size is 1 if it is a 25 percent off advertisement; Ø otherwise
Store-Size is 1 if it is a Patton's Place - 50 percent off advertisement; Ø otherwise

Result

$P(\text{belief}) = 1.06 - .20 \text{ Store}^b - .34 \text{ Size}^b - .19 \text{ Store-Size}^b \qquad R^2 = .11 \qquad N = 269$

$(.074)^a \qquad (.072) \qquad (.102)$

[a]Standard error
[b]$p < .05$

Probability of Belief given...

| | |
|---|---|
| Simpsons, 25 percent off | = .52 |
| Simpsons, 50 percent off | = .86 |
| Patton's Place, 25 percent off | = .72 |
| Patton's Place, 50 percent off | = .87 |

Patton's Place shoppers and the nonshoppers or buyers. The proportion of shoppers who believed the sale price was the best deal in town was not significantly lower than the nonshoppers or buyers. This result is slightly surprising considering that Patton's Place shoppers were most likely to disbelieve the store's statements. Examination of the store profiles showed that the shoppers evaluated Patton's Place as having better than "slightly competitive prices", a less favorable evaluation than the buyers but a considerably more favorable evaluation than Simpsons. This suggests that the shoppers, because they thought Patton's Place was a "competitively-priced" store, thought the sale price was the best deal.

## Extension of the Research Findings

Before the implications for the Federal Government and retailers are discussed, it is appropriate to consider the applicability of this research to the broader context of comparative price advertising. The findings are based on a fixed factor experiment and any extrapolation of the results is, by definition, judgmental.

The sampling frame was defined as homemakers who lived in selected census tracts in London, Ontario. There was no reason to suspect that credibility was related to sex, but this is not known. Any generalization of the findings to the population are made on the basis of females only. In terms of class differences, the particular sample selected should not constrain the generality of the findings to larger populations because the sample income distribution did not differ significantly from larger populations, and the analysis indicated that credibility was not dependent on social class. Given that the credibility

of comparative price advertisements was not a function of social class but rather a generalized tendency, it was reasonable to assume similar response distributions to the credibility measures would be obtained if additional samples were drawn from the population.

The experimental design contained three variables - the stores, sizes of discount and products on sale. The two stores were well established in the community. Patton's Place, the newer store, had been in operation since 1958. If it is assumed that, for the first few years of a store's existence, consumer confidence in a store increases the longer the store remains in business, the credibility of the store's advertisements was probably greater than less well established stores. Within this "well-established" framework, the stores represented two somewhat polar positions - the solid, old-line department store and the aggressive young retailer. The majority of retailers probably lie somewhere between the two in terms of advertising strategy. The response distribution to the credibility measures was dependent on consumer evaluation of these particular stores. However, their somewhat polar positions suggest, if a similar study used advertisements from different stores, the proportion of belief responses to the credibility measures would probably be between those obtained for Simpsons and Patton's Place.

The selected discount sizes were representative of those employed by the two stores. The average for the eight advertisements was 38 percent off. This figure was comparable to the average discount size of 31 percent obtained for all retailers in a survey of 11 United

States cities in 1953.[2] To the extent that the discount sizes used in the study represent the discount sizes used by retailers, the results should reflect the larger population.

It was difficult to ascertain what limitations the selected products imposed on projecting the results to other product categories. With more frequently purchased products, the consumer probably has more knowledge upon which to base her evaluations. However, it is not clear if the product per se would influence belief in the statements contained in comparative price advertisements. The effect of a difference in product price knowledge would probably influence the proportion of uncertain responses. Consumers' belief in the statements contained in the comparative price advertisements would be influenced by the degree to which the statements coincide with their perceptions.

## Theoretical Implications

The study of communications has shown that source and message credibility influence the receiver's reaction to the communications.[3,4] Source credibility has been defined as the perceived trustworthiness and expertness of the source.[5] Message content credibility has been defined as the congruency of the subject's attitudes towards the content.[6]

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[2]Thomas J. Hogan, "Shoppers Can Tell a Bargain", (Unpublished Study, Duquesne University, 1960).

[3]Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, Communication and Persuasion, (Yale University Press, 1953).

[4]Erwin L. Atwood, "The Effects of Incongruity Between Source and Message Credibility", Journalism Quarterly, XXXXIII, (Spring, 1966), 90-94.

[5]Hovland, op. cit., p. 35.

[6]Atwood, op. cit., p. 92.

Results of this investigation confirmed these findings, with some exceptions, within the retailer/consumer framework. Further, the findings indicated that, with respect to the credibility of comparative price advertisements, consumers employed two dimensions in evaluating the communications. One is the "credibility" dimension, analogous to the "trustworthiness" dimension, which was used by consumers in determining their belief in the stores' statements, i.e. had the store sold the product for the quoted regular price before the sale? Source credibility was defined as the perceived reliability of the retailer's advertising. Message credibility was determined by the discount size offered - a large discount size was considered as a low credibility message.

The second dimension was the "competitive price" dimension used by consumers in determining their belief in the sale price being the lowest in town. For the source, the dimension was defined as the perceived "price competitiveness" of the retailer. The message content was again determined by the discount size offered, but for the "price competitive" dimension, the large discount was considered more price competitive than the small. On the two dimensions, Simpsons was seen as a reliable advertiser but not a competitive priced store. Patton's Place was seen as an unreliable advertiser but also as a competitively priced store.

The study suggested that consumers' acceptance of the stores' statements was related to the store - respondents were more likely to disbelieve Patton's Place statements than Simpsons'. Message content (discount size) was related to credibility only for Patton's Place. While

a larger proportion of respondents disbelieved the large discount, as opposed to the small, at Simpsons the difference was not statistically significant. It should be noted that when the responses were combined by store, message content did have a significant effect on credibility.

The most reasonable explanation for the lack of message content effect for Simpsons probably was that the respondents based their evaluation of the advertisement mainly on Simpsons, not on the message content. Simpsons credibility was sufficient to overcome the low credibility message. This interpretation was somewhat different from what has been proposed by Hovland, et al.[7] Hovland hypothesized, but did not test, that with a high credibility source and a low credibility message there would be a tendency to dissociate the source and the content. This would lead to the acceptance of the message <u>independent</u> of the source.

The reconciliation of these arguments is that with this investigation, it was probably quite difficult to dissociate the source and the message. The consumers' responses were obtained while they were examining the advertisements and therefore the source and message were probably considered together. For Patton's Place, the respondent saw a low credibility message from a low credibility source, which was consistent with expectations. For Simpsons, when the low credibility message was presented a conflict arose. The result suggested the store's credibility overcame the low message credibility.

The results for the sale price measure also parallel previous communication research results if the two-dimension concept is accepted.

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[7]Hovland, op. cit., pp. 41-42.

That is, when consumers were asked if the quoted sale price for a product was the lowest price in town, their belief was influenced by the "price competitive" dimension. In other words, sale price belief depends on whether the consumer thinks the store has low or competitive prices and price reduction is competitive.

The findings revealed that the message influenced sale price belief: the large discount size received a greater proportion of belief responses than the small one. Source influenced belief only at the lower discount level - with a discount size of 25 percent off, Patton's Place received a greater proportion of belief responses than did Simpsons. At the large discount level there was no source effect. At that level, respondents considered only the message because it was a "price competitive" reduction.

This discussion introduced the two-dimension concept in order to explain the results. However, it is recognized this interpretation is based, in part, on the assumption that the two-dimensions concept exists. A further research study would be appropriate to validate this. A proposal for this kind of study is presented in the "Research Implications" section.

## Implications For the Federal Government

Implications for Federal Government officials concerned with misleading price advertising are reported in two parts. First, the resource allocation level for this consumer protection problem is deliberated. Second, possible strategies for achieving optimum benefits from a given resource allocation are discussed.

The research has shown that most consumers are not naive, credulous individuals who believe without question what retailers tell them. It revealed the majority of consumers did not believe the regular price as quoted. The proportion who were uncertain or who did not believe the sale price was the lowest price in town was approximately 44 percent across all advertisements.

Another measure of the consumer's propensity to believe the statements in the advertisements is presented in Table 55. Only seven percent thought the regular price was credible and the sale price was the best deal for the two advertisements they viewed. On the other extreme, two percent of the consumers did not believe the regular and sale price as quoted. The distribution indicates 93 percent disbelieved or were uncertain of at least one aspect of the statements contained in the comparative price advertisements.

The results presented in Table 55 should <u>not</u> be interpreted as indicating a widespread distrust of advertising. Consumers who gave a negative response to either the general reference measure or the sale price measure may have done so because they thought the store was high-priced or because they thought they could purchase the product more cheaply elsewhere. These disbelief reasons are not necessarily because of a general distrust of advertising. Rather, the results should be interpreted as indicating that most consumers in the sample questioned some aspect of the comparative price advertisements for one or more of the stated reasons; a distrust of sales, a distrust of the store, the belief that the store was high-priced and/or that they could obtain a better buy elsewhere.

TABLE 55. Distribution of credibility scores[1] for two advertisements viewed by respondents

| Credibility Score | Number of Respondents | Percentage of Respondents | Cumulative Percentage |
|---|---|---|---|
| 6 | 24 | 7.2 | 7.2 |
| 7 | 3 | .9 | 8.1 |
| 8 | 27 | 8.1 | 16.2 |
| 9 | 33 | 11.1 | 27.3 |
| 10 | 53 | 16.1 | 43.4 |
| 11 | 28 | 8.4 | 51.8 |
| 12 | 58 | 17.6 | 69.4 |
| 13 | 23 | 6.9 | 76.3 |
| 14 | 33 | 9.9 | 86.2 |
| 15 | 12 | 3.6 | 89.8 |
| 16 | 19 | 5.7 | 95.5 |
| 17 | 8 | 2.4 | 97.9 |
| 18 | 7 | 2.1 | 100.0 |
| TOTAL | 332 | 100.0 | |

[1]The credibility score is calculated by:
Summing the respondents' answers to the three questions for each of two advertisements,

where: "yes" = 1, "don't know" = 2, and "no" = 3.

If a respondent answered "yes" to all six questions she would receive a score of 6.

The analysis revealed that consumers considered the store selling the product and the size of discount in assessing the credibility of the advertisement. This suggested that most consumers neither fully accepted nor fully rejected the literal content of the advertisement.

This investigation did not determine the extent to which consumers' beliefs about the stores or discount sizes corresponded with the facts. To determine this would have required an exhaustive survey of prices of identical products by store over an extended period of time.

Consumers may have been misled by the degree to which their beliefs did not reflect the actual situation.

It should also be recognized that a majority of consumers, 56 percent, thought the quoted sale price was the lowest price in town. Further, as shown in Table 56, 35 percent of the subjects believed the sale price was the best deal for the two advertisements they viewed. The comparative price advertisements, by these measures, had a reasonable degree of effectiveness. While a majority of consumers disbelieved the quoted regular price, a majority (56 percent) also thought the sale price was the best deal.

TABLE 56. Distribution of sale price measure credibility scores for two advertisements viewed by respondents

| Credibility Score | Number of Respondents | Percentage of Respondents | Cumulative Percentage |
|---|---|---|---|
| 2 | 117 | 35.2 | 35.2 |
| 3 | 66 | 19.9 | 55.1 |
| 4 | 100 | 30.1 | 85.2 |
| 5 | 22 | 6.6 | 91.8 |
| 6 | 27 | 8.2 | 100.0 |
| TOTAL | 332 | 100.0 | |

[1]The credibility score is calculated by:
summing the respondents' answers to the sale price questions for the two advertisements,
where: "yes" = 1, "don't know" = 2, and "no" = 3.

In summary, the study has shown that:

1) The vast majority of consumers (93 percent) questioned one or more of the statements contained in a comparative price advertisement.
2) A majority of consumers (63 percent) were uncertain about or did not believe the regular price quoted.
3) Nearly one-half of the consumers (44 percent) did not believe that the sale price was the lowest price in town.
4) Consumers considered the store and the discount size when they evaluated the advertisements.

It appears that the government has been attempting to accomplish two main goals with respect to comparative price advertising:

1) To protect consumers from misleading price advertising.
2) To ensure that the communicative role of retail advertising is maintained.

With regard to the goal of consumer protection, the results indicated that, to a large extent, consumers are capable of protecting themselves. This suggests that <u>if</u> consumer protection were the <u>only</u> goal of interest to the government, the amount of resources allocated to this problem should be reconsidered.

However, the study has shown that belief in the retailer's statements was low; only 42 percent for all advertisements. If certain retailers exaggerate the extent of their discounts, the bonafide discounts of honest retailers may be disbelieved. This suggests that the government should be concerned with attempting to increase the consumer's confidence in the quoted <u>regular</u> price in comparative price

advertisements. If the statements of retailers are not believed, then the communication role of advertising for retailers is lowered. The resource allocation level should reflect the importance of this goal for government.

The actual size of the resource allocation is beyond the scope of this study. Its size should be determined by the seriousness of this problem in relation to other consumer protection problems.

The following suggestions for government strategy are based upon the results of this study. The suggestions did not consider the dollar volume of various merchandise which is sold at some price discount. Nor did the study examine the frequency of various discount sizes. Dollar volume by type of merchandise and frequency of selected discounts should be considered so that enforcement procedures, to some degree, reflect the actual retailing situation. For example, it appears that household durables represent a large dollar volume in the economy and are frequently sold at some price reduction. There may be other commodities of equal importance on a dollar volume criterion such as packaged goods which are frequently sold on a "cents-off" basis in the grocery trade.

Given a particular resource allocation level, the government should adopt a strategy which attempts to optimize their expenditures. The suggestions for consumer protection are based on the results of the sale price measure because it was considered a surrogate measure for action. If the consumers believed the sale price was the lowest price in town, they would be more likely to purchase the product at that store.

The results indicated that size of discount was the most important factor in the consumer's belief in the sale price measure. This suggests that large discounts hold the greatest potential for possible retailer abuse in misleading consumers. If consumers are most likely to believe the sale price is the best deal when the discount size is large, it is quite probable that dishonest retailers who employ large discounts in their advertisements are most likely to mislead consumers. Government officials could address this issue by concentrating their efforts on advertisements containing large sizes of discounts. If they explicitly state their policy, selectively monitor these advertisements and prosecute the retailers who abuse their privileges, the potential and actual misrepresentation of prices for large discount sizes probably would be reduced. Further, if retailers knew that a comparative price advertisement containing a large discount size likely would be scrutinized, they probably would exhibit greater care in ensuring their prices represented the facts.

The investigation revealed that the sale price of the competitive price store had a high probability of being seen as the best deal. Extensive price advertising is a method of developing a competitive price image. If competitive price stores are more likely to achieve sale price belief than noncompetitive price stores, it would suggest increased monitoring by government officials of competitive price store advertisements. A monitoring ratio might be established related to the proportion of comparative price advertisements to total advertisements employed by a retailer. Retailers with a high proportion of comparative price advertisements would be monitored more frequently than retailers with a low proportion.

It should be clearly understood this recommendation is not questioning the retailers' right to attempt to establish a competitive price image. The recommendation is concerned with ensuring that the advertisements of the aggressive price advertiser are accurate.

The credibility of comparative price advertisements was not influenced by social class membership, with an exception which has been noted. If government officials think education programs might increase the consumer's ability to protect himself, then the findings suggest the programs should not be directed towards any particular class. Since it was concluded that consumers had, to a large extent, the ability to protect themselves, education programs would not be recommended. Any resource allocation to the area would be better spent on reducing the amount of misleading price advertising, i.e. monitoring and prosecution of dishonest retailers.

While the government has been concerned that consumers believe advertising without question, some individuals involved with consumerism have felt the opposite situation actually exists. That is, people have become hypercritical of advertising and "the credibility of advertising in this country is at a dangerously low level".[8] The research findings for comparative price advertising indicate this is not so. While the proportion of consumers who disbelieved the quoted regular price was relatively high (52 percent) and the proportion who disbelieved the

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[8]David S. R. Leighton, "Responding to Consumerism", Financial Post, LXV, (February 13, 1971), 22.

retailers' statements was quite high (42 percent), the consumers based their evaluations on the information contained in the advertisements. This suggests that they are not showing a widespread cynicism towards advertising. Further, a majority of consumers (56 percent) believed the sale price was the lowest price in town which is a strong indication that advertising credibility still exists for a large number.

## Implications for Retailers

The implications for retailers are concerned with costs and benefits associated with comparative price advertising. Comparative price advertising is employed mainly to move specific merchandise and to create a competitive price image. Excluding actual advertising expenditures, the cost might be viewed as the offered discounts and their frequency.

Any judgment as to the overall effectiveness of an extensive or limited price advertising strategy is beyond the scope of this study. Obviously, a number of factors besides price may influence consumers' choice of stores. In particular, for durable goods, the guarantee the store offers on their merchandise is considered by many customers. Post transaction satisfaction is an important part of Simpsons strategy and this is recognized by consumers.[9] The following implications for retailer advertising strategy are relevant to the extent that price is an influence factor in the purchase decision.

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[9]"Post-transaction satisfaction" was the second most frequent reason given by respondents concerning what they liked about Simpsons. (Table 12).

The results show that image is very important for a retailer. The image consumers had of the store was a significant influence on their perception of the store's advertisements. More specifically, the two image components - retailer credibility and price competitiveness - influenced consumers' belief in the quoted regular and sale price.

In the comparison of the stores' advertisements, 70 percent of Patton's Place advertisements consisted almost entirely of comparative prices, approximately five times that of the 14 percent for Simpsons. Two major benefits were achieved by the aggressive price advertising strategy:

1) The store was evaluated as being quite price competitive.
2) Consumers were more likely to believe the sale price was the lowest price in town when viewing the store's advertisements.

The second benefit was revealed in the comparison of response distributions to the sale price measure for Advertisements $A_1$ and $B_1$ and Advertisements $G_2$ and $H_2$. These sets were matched for all factors including the regular price and sale price level. The findings, presented in Table 57, indicated that, for advertisements containing identical discount sizes, the aggressive price advertiser, Patton's Place, received a higher proportion of belief that the sale price was the lowest in town.

For the large discount size (50 percent off), approximately the same proportion of belief in the sale price was achieved by both stores. It appeared, for large discount sizes, the key element in influencing sale

price belief was the discount size: at a lower discount size level, the competitive price image of the store influenced sale price belief. This suggests Patton's Place has an advantage at low discount levels over Simpsons. In the short run, Patton's Place has a greater probability of selling merchandise at small discount levels. However, if Patton's Place continued a small discount policy for an extended period of time, it would probably lose some of its "price competitive" image. Simpsons has to offer larger discounts, relative to Patton's Place, in order to achieve the same sale price belief.

TABLE 57. Response distribution, sale price measure, selected advertisements (percentages)

Advertisements $A_1$ - $B_1$ - Chesterfield and Chair, 25 percent off

| Response | Patton's Place $A_1$ | Simpsons $B_1$ |
|---|---|---|
| Belief | 52 | 41 |
| Uncertain | 28 | 21 |
| Nonbelief | 20 | 38 |
| TOTAL | 100 | 100 |
| N = | 83 | 84 |

Advertisements $G_2$ - $H_2$ - Portable Television Set, 11 percent off

| Response | Patton's Place $G_2$ | Simpsons $H_2$ |
|---|---|---|
| Belief | 59 | 49 |
| Uncertain | 16 | 21 |
| Nonbelief | 25 | 30 |
| TOTAL | 100 | 100 |
| N = | 83 | 83 |

Certain costs are associated with comparative price advertising. Both retailers should be concerned with the low proportion of consumers who believed their statements. A summary of the relevant findings is provided in Table 58. A relationship did exist between acceptance of the stores' statements and sale price belief.[10] Consumers were more likely to accept the sale price if they believed the stores' statements than if they did not believe them. For the first location advertisements, the probability of belief that the sale price was the lowest in town, given that the consumer believed the stores' statements, was .75; sale price belief given nonbelief in the stores' statements was .58. The probabilities for the second location advertisements were .66 and .40 respectively. Both stores lost some of the impact of their advertisements because of consumer disbelief of their statements.

The problem was more serious for Patton's Place, the aggressive price advertiser, because of lower consumer belief in its statements. In one case, Advertisement $E_2$, only 13 percent of the consumers believed the store usually sold the product for the quoted regular price. However, a trade-off is involved between attempting to achieve a "high source credibility" image and a "competitive price" image. The possibility exists that a particular advertising strategy cannot establish this dual favorable image because the two image components are not compatible. That is, a competitive price image can be established by an aggressive price advertising strategy but at the cost of being seen as a "low credibility"

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[10] Chi-square analysis revealed a significant degree of association. (Table 7).

store. This strategy creates a low credibility image because consumers see the store as always having a sale and therefore question whether it ever sells products at the quoted regular price. This investigation suggests a favorable image on both components may be quite difficult to achieve.

TABLE 58. Response distribution, store reference measure, all advertisements (percentages)

Store reference measure

| | Advertisement | | | | |
|---|---|---|---|---|---|
| | $A_1$ | $B_1$ | $C_1$ | $D_1$ | |
| Response | Patton's Place 25% off | Simpsons 25% off | Patton's Place 50% off | Simpsons 50% off | Total |
| Belief | 29 | 50 | 22 | 41 | 35 |
| Uncertain | 17 | 12 | 8 | 16 | 13 |
| Nonbelief | 54 | 38 | 70 | 43 | 52 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 83 | 84 | 84 | 81 | 332 |

| | $E_2$ | $F_2$ | $G_2$ | $H_2$ | |
|---|---|---|---|---|---|
| Response | Patton's Place 44% off | Simpsons 40% off | Patton's Place 11% off | Simpsons 11% off | Total |
| Belief | 13 | 50 | 55 | 78 | 49 |
| Uncertain | 22 | 23 | 17 | 10 | 18 |
| Nonbelief | 65 | 27 | 28 | 12 | 33 |
| TOTAL | 100 | 100 | 100 | 100 | 100 |
| N = | 82 | 84 | 83 | 83 | 332 |

A specific cost appears to be associated with an aggressive price advertising strategy. The analysis revealed that consumers who had shopped but not bought at Patton's Place were very negative in their evaluation of the store, particularly of its advertising. These shoppers were more likely to disbelieve the store's statements than were consumers who had bought merchandise there. It seems probable those shoppers had had an unpleasant experience. It may be they had visited the store and possibly found a significant disparity between their perception of the advertised products and the merchandise actually sold. They constituted 21 percent of the total sample and it was probable the store had lost many of them as potential customers.

The research results suggest the adoption of an extensive price advertising strategy appeared to affect two components of the retailer's image - credibility and price competitiveness. The competitive price image increased the acceptance of the store's sale prices as being good deals. Concurrently, the low credibility image led to a low consumer belief in the store's statements. This condition reduced, to a degree, consumer acceptance of the sale price but, on net, the competitive price image was of greater importance in influencing consumer belief in the quoted sale price. Selective use of comparative price advertisements established a high credibility image and a relatively noncompetitive price image. With an exception, consumers had a greater propensity to believe the store's statements and, at the same time, a lower propensity to accept the sale price as being the lowest price in town. The exception occurred with advertisements containing large discount sizes, i.e. 50 percent off. At that level, the competitive price image was not a

factor in influencing sale price belief.

In comparing small and large discount sizes, when a noncompetitive price retailer offered a large discount, he achieved a greater change in the proportion of consumers who believed the sale price than did the competitive price retailer. In a sense, the latter paid a higher cost for the large discount because he had already achieved a relatively high acceptance of the sale price at a lower discount size. The possibility existed for this retailer to move merchandise at low discount sizes because of the competitive price image he had achieved.

On a broader level, retailers should be concerned with the low credibility attributed to their statements. They should be concerned because it increased, to a degree, the probability that a consumer would not think the sale price was the lowest price in town. Retailers should also be concerned because consumers are questioning their honesty.

The solution to the problem is easy to recommend but difficult to implement. Retailers who misrepresent prices at which products are usually sold should be prosecuted and their activities curtailed. If misleading price advertising was eliminated, the credibility of comparative price advertising should increase. The government is attempting to accomplish this by the monitoring and prosecution of dishonest advertisers. Because retailers have much to gain from the elimination of this practice, they should be willing to play an active role in achieving this objective.

Certain steps in this direction have been taken by various business organizations. Two examples are; the "Guides for Comparative

Price Advertising" issued by the Retail Council of Canada[11] and the "Truth in Advertising" campaign of the Canadian Advertising Advisory Board.[12] Additional steps could be taken. Retailers, as a group, could establish their own investigation agency which would take the form of a self-policing organization. Members who abused their privileges could be warned and if they did not discontinue their practices, the information concerning their activities could be turned over to the appropriate government agency for possible prosecution. Nonmembers could be treated in a similar fashion.

The investigation revealed that less than half of the consumers believed the store sold the product for the quoted regular price before the sale. This suggests honest retailers are being placed in the same category as dishonest retailers by a substantial number of consumers. The proposal for a self-policing organization of retailers would appear to be justified. The benefits of the plan would accrue to both groups - retailers and consumers.

Finally, the results of this study pose an interesting question: how does a retailer establish a competitive price image if consumers do not believe his messages? That is, if people don't believe the regular price and the size of discount, when the aggressive retailer first begins advertising, why would they eventually believe the store is price competi-

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[11] "Guidelines for Comparative Price Advertising", Retail Council of Canada, (Toronto: September, 1969).

[12] Press Release, Canadian Advertising Advisory Board, (Toronto, January 15, 1971).

tive? The answer may be connected in some way to the "sleeper effect" where the "untrustworthy" source is forgotten after a period of time and his message has a delayed positive effect.[13] In this case, the repeated messages, i.e. "we always have a great sale", eventually have an effect in spite of the fact the message came from a "low credibility" source.

## Implications for Research

The research implications are reported in three parts. The first discusses the possibility of a further study in the comparative price advertising area which is outside the scope of this research. Second, a potential research study which is an extension of this investigation is reported. Finally, a study which attempts to validate the dual image concept is discussed.

This investigation focused on the credibility of comparative price advertisements in order to measure the extent of consumer belief in such advertisements. The findings were employed as a measure of the importance of the problem for government action. The other part of the problem is the degree to which misleading price advertising occurs. While it should not be tolerated, the extent of the practice is another measure in determining the resource allocation level needed to attack the problem.

The extent of misleading price advertising could be measured by a cross-sectional survey of comparative price advertising in daily newspapers. The study would be designed to ascertain the proportion of advertisements which contain comparative prices, and the proportion

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[13]Hovland, op. cit., p. 30.

which misrepresent the price the product usually sells for. The percentage of misleading prices requires knowledge of the prevailing product price in the trading area and the price the advertising store usually sold the product for prior to the sale. The guidelines established by the Federal Government could be used for the regular price definitions. The prevailing product price might be obtained by a survey of the largest retailers within the trading area. The price the store usually charged for the product would have to be obtained from the advertising store. The potential exists for biased reporting by these stores and safeguards would have to be established.

The survey could determine the extent of misleading price advertising and the degree to which prices were misrepresented. The results could be reported by retailer, product and geographic category. The information could be employed by Federal Government officials in deciding upon the resource allocation and predicting areas where misleading price advertising would be most likely to occur.

This investigation used the belief that the sale price was the lowest price in town as a surrogate measure for consumer action. Given the research objectives, this measure was appropriate for the investigation. For retailers interested in the effects of comparative price advertising on consumer purchase activity, the measure is not entirely satisfactory. Information is required to calculate the relationship between consumer beliefs and actions. Simply stated, what is the probability of consumers visiting a store if they think the sale price for the product is the lowest price in town?

The sample frame for the study would be restricted to consumers contemplating a product purchase. Assuming the sample could be obtained, the survey would be conducted in two stages. First, measurement of the consumer's evaluation of a number of stores which sold the product would be obtained for retailer credibility and price competitiveness. For a number of sample advertisements, the consumer would be asked if the sale price was the lowest price in town. The sample advertisements would be presented to the subject as "typical advertisements of the store". The second stage of the survey would be conducted after the subjects had purchased the product. The key information obtained in the second survey is the stores visited prior to purchase and the store at which the product was purchased. This study would provide an approximate estimate of the relationship between consumer belief and consumer action.

The final proposal for a research investigation is an attempt to validate the dual image concept. The research would be a replication of this investigation except that the consumers' reasons for belief in the credibility measures would be obtained. If a consumer believed the store usually sold the product for the quoted regular price or that the sale price was the best deal in town, she would be asked why she believed the prices. The prediction is that for the store reference measure, the reasons would be related to store and message credibility, e.g. "The store is a reliable advertiser", and for the sale price measure, the reasons would be related to price competitiveness, e.g. "The store is low-priced" or "At 50 percent off, the sale price is the best deal". The classification of the belief responses could prove that consumers evaluate the regular price and sale price on two different dimensions.

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# APPENDIX A

## Questionnaire

The questionnaire, including the cover sheet with interviewer instructions, is presented in the following eleven pages. The particular questionnaire shown is for Order Number 1 and contains Advertisements C, F and D. There were eight orders in the questionnaires and the remaining seven, with their respective advertisements were reported in Table 4.

Cover Sheet for Questionnaire

1) The order for this questionnaire is order Number 1

First Ad C

Second Ad F

Third Ad D

2) The screen questions are:

a) Are you the lady of the house Yes ____ No ____

b) Are you or any member of your family an employee of a furniture store or department store in London?

Yes ____ No ____

3) Reminder - After showing the first advertisement to the respondent - before Question #4a is asked state; "You would imagine that you ran across this ad while reading tonights London Free Press".

4) Please write respondent information here:

Name _____

Address _____

Telephone # _____

QUESTIONNAIRE

INTRODUCTION

"Good evening, I'm Mrs._____of Canadian Facts. We are asking housewives their views about some retail stores in London area, and I would like to ask you a few questions. Your help is of great importance to the study we are doing."

1. Have you or your family ever purchased any of the following appliances and furniture either new or used?

a) Stove - new or used — Yes( ) No( ) New( ) Used( )

b) Chesterfield and Chair - new or used — Yes( ) No( ) New( ) Used( )

c) Automatic Dishwasher - new or used — Yes( ) No( ) New( ) Used( )

d) Washing Machine - new or used — Yes( ) No( ) New( ) Used( )

e) Black and White Television Set - new or used — Yes( ) No( ) New( ) Used( )

f) Room Air Conditioner - new or used — Yes( ) No( ) New( ) Used( )

2. How often do you shop around at different stores to compare merchandise and prices before buying things?

REGULARLY ( ) FAIRLY OFTEN ( ) ONCE IN A WHILE ( ) NEVER ( )

3. How often do you spend time looking for bargains or special sales when you are shopping?

REGULARLY ( ) FAIRLY OFTEN ( ) ONCE IN A WHILE ( ) NEVER ( )

I am going to show you some copies of some actual newspaper advertisements and I would like you to imagine that they are appearing in tonights London Free Press.

ADVERTISEMENT C

In this ad if you would look at this chesterfield and chair on sale at Patton's Place. This picture is an enlargement of that part of the ad.

4. a) The regular price is shown as $370.00. Do you think this is the price Patton's Place has been selling this chesterfield and chair for during the last few days?

Yes_____No_____DK_____

If no to 4.a)
- i - Why?_____

_____

_____

- ii - About what price do you think Patton's Place has been selling this chesterfield and chair for during the last few days?_____

4. b) Do you think this "regular price" of $370.00 is what people would have to pay at other stores around London for this chesterfield and chair at the present time?

Yes_____No_____DK_____

If no to 4.b)
- i - Why?_____

_____

_____

- ii - About what price do you think people would have to pay at other stores around London?_____

4. c) After the sale is over, what is the price you think Patton's Place will sell the chesterfield and chair for?_____

5. a) Do you think the sale price of $185.00 is the lowest price at which you could buy this chesterfield and chair in London?

Yes_____No_____DK_____

If no to 5.a)
- i - Why?_____

_____

_____

- ii - What price do you think you could buy it for?_____

ADVERTISEMENT F



In this ad if you would look at this dishwasher on sale at Simpsons. This picture is an enlargement of that part of the ad.

4a) The regular price is shown as $339.98. Do you think this is the price Simpsons has been selling this dishwasher for during the last few days?

Yes _____ No _____ DK _____

If no to 4.a)
- i - Why? _____

_____

_____

- ii - About what price do you think Simpsons has been selling this dishwasher for during the last few days? _____.

4b) Do you think this "regular price" of $339.98 is what people would have to pay at other stores around London for this dishwasher at the present time?

Yes ____ No ____ DK ____

If no to 4.b)
- i - Why? _____

_____

_____

- ii - About what price do you think people would have to pay at other stores around London? _____.

4. c) After the sale is over, what is the price you think Simpsons will sell the dishwasher for? _____.

5. a) Do you think the sale price of $204.99 is the lowest price at which you could buy this dishwasher in London?

Yes ____ No ____ DK _____

If no to 5. a)
- i - Why? _____

_____

_____

- ii - What price do you think you could buy it for?

_____.

ADVERTISEMENT D

In this ad if you would look at this chesterfield and chair, on sale at Simpsons. This picture is an enlargement of that part of the ad.

4. a) The regular price is shown as $299.98. Do you think this is the price Simpsons has been selling this chesterfield and chair for during the last few days?

Yes_____No_____DK_____

If no to 4.a)
- i - Why?_____

_____

_____

- ii - About what price do you think Simpsons has been selling this chesterfield and chair for during the last few days?_____

4. b) Do you think this "regular price" of $299.98 is what people would have to pay at other stores around London for this chesterfield and chair at the present time?

Yes_____No_____DK_____

If no to 4.b)
- i - Why?_____

_____

_____

- ii - About what price do you think people would have to pay at other stores around London?_____

4. c) After the sale is over, what is the price you think Simpsons will sell the chesterfield and chair for?_____

5. a) Do you think the sale price of $149.88 is the lowest price at which you could buy this chesterfield and chair in London?

Yes_____No_____DK_____

If no to 5.a)
- i - Why?_____

_____

_____

- ii - What price do you think you could buy it for?_____

6. a) Now I'd like you to imagine that there are two large appliances such as washing machines. They are the same brand and the same model but one has been used as a demonstrator in a store. What differences would you expect to find between the two washing machines, if any?

_____

_____

_____

_____

b) Do you think the demonstrator should sell for less than the crated model?

Yes_____No_____DK_____

c) If Yes
How much less? 5%____10%____20%____30% or more____.

Now I'd like to ask you to rate Simpsons and Pattons on a number of different categories. What we are interested in getting is your feelings about these stores.

SIMPSONS

| | EXTREMELY | QUITE | SLIGHTLY | NEITHER ONE NOR THE OTHER | SLIGHTLY | QUITE | EXTREMELY | |
|---|---|---|---|---|---|---|---|---|
| Courteous Sales People | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Discourteous Sales People |
| Misleading Advertising | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Believable Advertising |
| Noncompetitive Prices | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Competitive Prices |
| Unhelpful Sales People | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Helpful Sales People |
| Unreliable Advertising | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Reliable Advertising |
| Well Liked by Your Friends | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Disliked by Your Friends |
| Low Pressure Sales People | ___ | ___: | ___: | ___: | ___: | ___: | ___: | High Pressure Sales People |
| High Quality Products | ___: | ___: | ___: | ___: | ___: | ___: | ___: | Low Quality Products |

PATTON'S PLACE

| | EXTREMELY | QUITE | SLIGHTLY | NEITHER ONE NOR THE OTHER | SLIGHTLY | QUITE | EXTREMELY | |
|---|---|---|---|---|---|---|---|---|
| Courteous Sales People | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Discourteous Sales People |
| Unreliable Advertising | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Reliable Advertising |
| Unhelpful Sales People | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Helpful Sales People |
| Disliked by Your Friends | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Well Liked by Your Friends |
| Believable Advertising | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Misleading Advertising |
| Low Pressure Sales People | ____: | ____: | ____: | ____: | ____: | ____: | ____: | High Pressure Sales People |
| Competitive Prices | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Noncompetitive Prices |
| High Quality Products | ____: | ____: | ____: | ____: | ____: | ____: | ____: | Low Quality Products |

8. a) Have you ever shopped for furniture or large appliances at Simpsons?

Yes_____No_____DK_____

If Yes to 8.a)

- i - What did you like most about shopping at Simpsons?

_____

_____

- ii - What did you like least about shopping at Simpsons?

_____

_____

- iii - Have you ever bought furniture or large appliances at Simpsons:

Yes_____No_____DK_____.

8. b) Have you ever shopped for furniture or large appliances at Pattons Place?

Yes_____No_____DK_____

If Yes to 8.b)

- i - What did you like most about shopping at Pattons Place?

_____

_____

- ii - What did you like least about shopping at Pattons Place?

_____

_____

- iii - Have you ever bought furniture or appliances at Patton's Place?

Yes_____No_____DK_____

8. c) Have you purchased any of the following in the last year?

- i - Black and white television set: Yes___ No___

- ii - Chesterfield and chair: Yes___ No___

-iii - Automatic dishwasher: Yes___ No___

The following questions are for statistical purposes only to help us in analyzing the survey results.

9.a) What is your marital status?

Single.....(__)
Married.....(__)
Widowed, separated, divorced.....(__) Ask b and c

b) Do you have any children? Yes(__) No(__)

IF YES

c) How many? _____
How many sixteen years of age or younger? _____

10. What is the highest grade of school or college that you have completed?

a) Primary or elementary school.... (____)

b) 1 - 3 years of high school .... (____)

c) High school graduate.... (____)

d) 1 - 3 years college (including a trade, technical, or business school).... (____)

e) College graduate.... (____)

f) Post graduate (MA, MS, Ph.D., LLB., MD., DDS., etc.).... (____)

11. What is the highest grade of school or college that your husband has completed?

a) Primary or elementary school.... (____)

b) 1 - 3 years of high school.... (____)

c) High school graduate.... (____)

d) 1 - 3 years college (including a trade, technical, or business school).... (____)

e) College graduate.... (____)

f) Post graduate (MA., MS., Ph.D., LLB., MD., DDS., etc.).... (____)

12.a What is your occupation? _____

_____

b What is the occupation of the chief wage earner (if not interviewee) _____

_____

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Dear Sirs and Gents:

I am pleased to confirm your order to purchase our entire Sample Room and End-of-the-Line inventory [illegible]. Our fleet of transport trailers will deliver to your store and warehouse not later than February 12th.

You will be interested to learn that, in the history of the Kroehler Company, yours is one of the fastest single purchases ever made in the London Area to an intercompany dealer, and I congratulate you on achieving this milestone.

Sincerely,

Gerald Pivots,
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Kroehler Top Line Classic Bedroom [illegible] Reg. $342.95

Gold Mattress Kroehler Traditional Sofa [illegible] Reg. $324.95

Kroehler Bedroom Classic [illegible] Reg. $349.95

72" 9-DRAWER, 2-DOOR, TRIPLE DRESSER WITH CARVED FRAME MIRROR, PANEL BED WITH GOTHIC PEDIMENT, AND 41" CHEST-ON-CHEST

Exclusive carved Gothic motif in beautifully grained Butternut veneers and solid, exotic Pecanwood . . . with a Tawny Sherry finish to complete its world of old-world charm.

Bed Chesterfield [illegible] Reg. $299.95 Sale $189.95

2-Pce. Traditional Classic $432.95

[illegible] 2 Pce. Traditional Style Reg. [illegible] $297.95

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*Restoring the international monetary structure*

# Redefinition of claims against gold urged to protect dollar

rt L. Kraus

York Times Service

YORK — Few of us ge disharmony formulrence our successors to drawer, third parties arations of war.

after how had the situ- to be, if we can avoid a spade a spade we unk that we have kept open for a return to d that used to be. tethroned monarchists, in eternal hope.

solds true for the inter- monetary structure o long as a chance re- or restoring the struc- thorities are loathe to ledge the changes that have occurred. They ined to paper over the es of disharmony.

* * *

moment, things look brighter. Passage of crease and spending the United States in- arently the probabilities e United States soon paying for most of the it buys in real goods rvices, not American

trouble in France re- the probability that nen, effectively at least, able to stand atop a pile of gold and wag- ing finger at the Unit- es for its profligacies em of the conflicts in netary elections seems e that France will use imulated reserves to the present value of its

ndsay ecision crucial nation

m Wicker

w York Times Service

HINGTON — Mayor y of New York probably only politician in the y who has established a with the black people urban ghetto, who has their respect as a lead- ant figure like the slain Robert Kennedy. ft is ironic, if not sur- that Kennedy's mur- ould confront Lindsay political choice that might either gratify or ng, and ironically of th his public life and the nation.

ation could be honora- ded if Gov. Rockefeller der appointment to the in Kennedy's stead to ction next October is reported to be Rockefel- prone, however, and his with both the content strategy of trying to be- hemself's inheritor on ational scene.

pollster's very successful 12" New York City- makes Tom Rockefeller's ethics and probably ve him more circulating on Madison Avenue. There are real reasons, both politi- and personal, why he can't be the Senator and at may be accomplished the other route.

* * *

ator could make the ford role in Washington ould attack on urban ave problems be made- he federal level for in- is the proper place for ding the programs he mended as a member of resident's commission on ssassination. He can argue ly that the city itself is too powerless and too ess to solve these and ous problems, and that national problems must be dealt with on a na- level.

ically, by moving now Senate, Lindsay could the place that a big ex- plosion in New York, mmer or in the future, decision or no decision as well as the march ington the night long- ongly elected in 1968 ould safe seats in Wash- he could run for the ate in 1970 or for the ent in 1972. Either ld be a tremendous ge in the character of ican politics. Rockefeller would be President of New York City. Lindsay would be the Republican party's candidate with all that implies. Lindsay would be making a mockery of the New York City Democratic party, for which he will be ready, if not particularly eager, when or if he is

The flareup in Berlin reminds West Germany once again of its close military ties to the United States and of its vital interest in assuring a continued American presence. There seems little doubt, if there ever was any, that the Germans will continue to cooperate with the United States in financing the American international payments deficit.

It might also seem as if the Russians, on cue, acted at the moment of de Gaulle's weakness to emphasize western European divisions.

For all the current enthusiasm, however, what really has changed? The United States remains committed primarily to full employment and maximum growth. Europe primarily to price stability. The United States continues to view its responsibilities as worldwide, while Europe views its own as continental.

* * *

Europe may hold claims to the United States gold, and thus a veto over domestic American excesses, but the United States remains the biggest customer for the world's exports and Europe is far more dependent on exports than the United States.

The economic and political philosophies of each area differ and each, in effect, has a stranglehold on the other. Why not recognize the differences and seek to ameliorate them? This is the question asked by C. Fred Bergsten, former assistant chief of the international payments division of the state department, in an article in the current issue of Foreign Affairs.

People who have attempted to assign dimension to disaster have described one possible result of a collapse of the international monetary structure as a division of the west into two great trading areas, a dollar bloc and a gold bloc. The sterling area, split down the middle, would be forced to find a home in one of the two major camps.

* * *

Bergsten suggests that much of this already has occurred. In exchange for exemption from American capital export controls, Canada, Japan and the underdeveloped countries have been drawn steadily closer to the United States. In return, they have agreed not to cash in their dollars for American gold.

So has West Germany. In March, 1967, it agreed to continue financing the American payments deficit rather than risk the withdrawal of American troops. Bergsten describes the German commitment to the dollar bloc as one of the few formalized ones and one made despite the clear possibility of staying out.

In addition to France, the gold bloc includes Belgium, the Netherlands, and Switzerland, the nations that clung longest to gold during the 1930s. They have been joined by South Africa, Spain and Austria, among others.

Bergsten suggests that these arrangements be formalized and that adjustment between the two areas occur by permitting greater exchange rate flexibility. Exchange rates would remain fixed within the dollar area. They would remain fixed also within the group of nations whose fortunes are linked inevitably to a steadily integrating Europe.

The chaos that undoubtedly would result if individual countries were able each to set its own price for the dollar thus would be avoided.

Between the dollar and European currencies, however, the exchange rate would be permitted to fluctuate up to perhaps 3 per cent of its fixed parities, in contrast to 1 per cent at present.

* * *

Europe could continue to insist on gold in payment of dollar-bloc deficits. But this would mean steady depreciation of the dollar and growing price competition for European manufacturers. Or Europe could avoid helping to promote U.S. exports by accepting additional dollars.

Bergsten sees big advantages to such an arrangement: the elimination of any need for discrimination between the areas; the growth of trade and direct investment based on long term market and profitability rather than exchange considerations; the ability of nations to choose between areas; the lifting of American payments restrictions, and the freeing of domestic policy on both sides of the Atlantic dealwith domestic problems.

Above all, Bergsten suggests, redefinition of the U.S. payments deficit and claims against the gold stock to get out the dollar and transactions should help appreciably to restore confidence in the dollar.

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## Just how much influence does the moon really have?

Why is it so many people, among them housewives, farmers, fishermen, and people in love, allow themselves to be fooled by the moon?

We know the moon influences the tides. But does it really exert influence on weather, plant growth, animals, daily affairs of men and women? Does success in domestic matters or one's occupation really depend on a phase of the moon?

We can dismiss much of it as nonsense, yet today there are still young ladies who believe they can see the face of their future husband simply by drinking white wine and rose water, then look at the moon through a silk scarf. Many still believe they mustn't let moonlight shine into their homes. So they draw the drapes to keep it out. To see the moon through glass is, they say, an invitation for evil influences.

Indeed, man's history is full of strange lore associated with the full moon. Now, as in time past, the rise of the moon above the horizon is still to many a signal to start a new project assured of success.

Knowing the existence of this belief prompted real estate agents to advertise as "Moon Estate Agents" and offer 100-acre moon plots at about a dollar apiece.

How strange they should retain lawyers to sue each other, claiming they had filed their claims before the other? And how doubly moonstruck were those who bought plots?

Few people are more practical than farmers, yet it may seem odd many plant and harvest according to the moon's phases. They sow their root crops between the first quarter and the full moon, their leafy plants when the moon is waning. Specifically, potatoes do best (so one belief runs) when planted in the dark.—DAVID G. REES.

# futures trade
# row range
# icago market

[illegible] — Grain fi- [illegible] ed nervously price range Trade Thurs- months on the [illegible] s, however, [illegible] ions and soy- [illegible] ctively lower. [illegible] at most trad- [illegible] a stand-aside [illegible] c issuance of [illegible] s government [illegible] to list the farmers have [illegible] ions and the [illegible] es low much [illegible] interest to de- [illegible] ng crops this

1954: [illegible] '54 — Thin of- [illegible] erers interest [illegible] in oil crush- [illegible] he Winnipeg [illegible] Thursday. [illegible] hedge offer- [illegible] exporter de- [illegible] e of offerings [illegible] a decline in [illegible] ies at eleva- [illegible] xporter inter-

[illegible] on track 100,000 [illegible] 40,000 bushels [illegible] tally took 1- [illegible] of durum, for [illegible] April and

[illegible] es of Canadian [illegible] lat included: [illegible] bushels. China [illegible] long 2,600.

[illegible] tones

## Mercantile Exchange

[illegible] Mercantile Exchange [illegible] Thursday [illegible]

CHICAGO CASH PRICES

[illegible] CHICAGO (AP) — Cash wheat No. 2 hard winter 1.91¼, nom. No. 1 dark hard winter 1.87¾, nom. No. 2 dark hard winter 1.87¾, nom. No. 1 yellow 2.69¼, nom. No. 2 yellow 2.69¼, nom.

# Mercantile Exchange

[illegible] Mercantile Exchange [illegible] Thursday [illegible]

# ıit, vegetables

[illegible] Cucumbers, [illegible] Tomatoes, [illegible] Lettuce, [illegible] Potatoes, [illegible] Onions, [illegible] Beans, [illegible] Peppers, [illegible] Potatoes, [illegible] Radish, [illegible] Rutabagas, [illegible] Tomatoes, [illegible]

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[illegible] prices are low because these draperies are made in Simpsons workrooms during the [illegible] season

[illegible] fabrics are of the highest quality [illegible] the tailored and workmanship up to [illegible] our high standards. 120 pairs only [illegible] so hurry to Simpsons Warehouse Sale. [illegible] you love at these low prices

[illegible] Pinch [illegible] modern design

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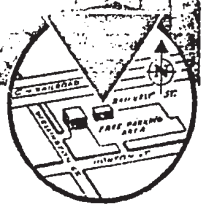


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1 ONLY — GAMES TOPS 10 [illegible] ½" square card table. Originally 34.98. Each 18.88

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5 ONLY — WALL MIRRORS. Decorative frames in [illegible] Originally 32.50. Each 18.88

1 ONLY — USED "KENMORE" ELECTRIC DRYER. 55 minute timer. 3 temperatures. Sale 35.99

2 ONLY — SUNBEAM ELECTRIC SNOW THROWERS. 16" wide 18" auger. Rubber scraper. Regularly 109.95. 89.88 Each

100 ONLY — CUSHION COVERS. A varied chair print, square, knife edge. Approximately 14" x 15". Each 29¢

20 ONLY — PRO HOCKEY STICKS. Right, twin blade and left curve models. Fiberglass wrapped for extra protection. Price Regularly 2.98. Each 1.99

### — 2 p.m. Saturday —

5 ONLY — LAMP TABLES. Drum walnut finish. Sturdy sliding. Originally 29.95. Each 16.88

1 ONLY — USED "THOR" SQUARE TUB WRINGER WASHER. Heavy [illegible] 39.99

4 ONLY — LAVATORY BASINS. Wall mounting complete. Each [illegible] Originally 24.98. Each 16.88

10 ONLY — 19" ROTARY LAWN MOWERS. Buy now and be ready for spring! Trip-easily Rotary power mower with powerful 3-H.P. Briggs and Stratton 4-cycle engine. Fast, easy open recoil starting. 3" wheels for easy manoeuvring. Blade-stop means less clogging. Built in Canada — 100% guaranteed and serviced in London. Each 56.88

20 ONLY — STEEL SHELVING UNITS. Save cost to [illegible] basement, workshop, garage, [illegible] either. 5 adjustable [illegible] Finished in [illegible] Assembled 18" [illegible] 72" high. 25" [illegible] deep. Regularly 16.95. Each 12.99

30 ONLY — FOLDING DOORS. "Interlite" frosted in shades of Teak, Walnut or Ash. Size: 32 x 78" [illegible] 80" [illegible] 38 x 80". [illegible] (Not each size in every [illegible]) Regularly 11.95 or 13.95. 7.99

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To fit openings 36" x 78 or 80". Regularly 21.95. Each 14.99

6 ONLY — 16" ALUMINUM SNOW PUSHERS. Strong [illegible] Lightweight. Regularly 5.19. Each 4.29

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2 ONLY — BEAVER 10" RADIAL ARM SAW by Rockwell. A versatile one to the [illegible] Cut most materials [illegible] Rockwell-built [illegible] features. Automatic safety clutch. Push-button start. Not [illegible] belt, safety [illegible] blower, [illegible] Originally 299.50. Each $240

3 ONLY — McCULLOCH CHAIN SAW KITS. For home [illegible] Kit [illegible] 6 B.H.P. Power head [illegible] Rewind [illegible] Automatic safety clutch. Push-button start. Not [illegible] belt, safety [illegible] blower, [illegible] Regularly 154.95. Kit 139.99

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2 ONLY — "ARGUS" ROUND SLIDE PROJECTORS — [illegible] Automatic [illegible] and [illegible] with all-top [illegible] features. Originally 149.95. Each $100

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1 ONLY — 500 WATT STACK LOADING PROJECTORS. [illegible] Originally 44.95. Each $34

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1 ONLY — "BELL & HOWELL" DUAL 8 MOVIE PROJECTOR. [illegible] Originally 179.95. Sale 129.99

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1 ONLY — "KODAK" M2 SUPER 8 MOVIE CAMERA. Each $20

1 ONLY — "KEYSTONE" AUTOMATIC SUPER 8 MOVIE CAMERA. [illegible] Each $30

1 ONLY — "KEYSTONE" SUPER 8 MOVIE CAMERA — [illegible] Originally 89.95. Each $55

1 ONLY — "SEARS" 35MM PROJECTOR. Takes [illegible] Originally 79.95. Each 49.99

1 ONLY — CARTRIDGE LOAD CAMERA KIT. [illegible] Each $8

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1 ONLY — 12' x 26.8" GOLD COLOR NYLON. Regularly $245. Sale $195

1 ONLY — 12' x 21' LOOPED NYLON RUG. Beige. Regularly 326.50. Sale $225

1 ONLY — 12' x 13½' LOOPED NYLON RUG. Green. Regularly $184. Sale $115

1 ONLY — 12' x 13½' PLUSH PILE ACRILAN RUG. Beige. Regularly 344.95. Sale $187

1 ONLY — 12' EVALAN RUG. Gold color. Regularly $175. Sale $79

1 ONLY — 8' x 11'2" EVELAN RUG. Black and White tweed. Regularly 114.90. Sale $45

1 ONLY — LOOPED NYLON RUG. Green. Regularly 118.50. Sale $75

1 ONLY — LOOPED NYLON RUG. Red. Regularly 118.50. Sale $75

### Save on Bedroom and Dining Room Furniture

1 ONLY—4 DRAWER CHEST. Walnut finish. Originally 119.95. Sale 69.88

1 ONLY—4 DRAWER CHEST. Colonial style. Originally 119.50. Sale 79.88

1 ONLY—4 DRAWER CHEST. Colonial style. Originally 119.50. Sale 79.88

1 ONLY — BOOKCASE. By "Kroehler". Walnut finish. Originally 168.95. Sale 99.88

1 ONLY — 6 DRAWER CHEST. Antique White with Colonial trim. Originally 89.95. Sale 59.88

1 ONLY — DROP LEAF TABLE. Walnut finish. Originally 89.95. Sale 59.88

1 ONLY — TEAKWOOD EXTENSION TABLE. Originally 89.95. Sale 69.88

2 ONLY — SERVERS. Nomtar Arbutite top. Mounted on castors. Originally 69.50. Each 38.88

1 ONLY — SERVER. Colonial style. Originally 119.95. Sale 89.88

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1 ONLY — 5 DRAWER CHEST. Arvin finish. Originally 32.95. Sale 18.88

1 ONLY — 6 DRAWER TRIPLE DRESSER. Arvin finish. Originally 84.50. Sale 68.88

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15 only. Kitchen, Bedroom and Dining chairs in [illegible] Originally $11 to $33. Each 6.88 to 44.88

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1 ONLY — COLDSPOT 10 CU. FT. CHEST FREEZER. [illegible] Originally 209.95. Floor model. 169.99

1 ONLY — "COLDSPOT" 16 CU. FT. CHEST FREEZER. Porcelain interior. [illegible] Originally 299.95. Floor model. 219.99

1 ONLY — COLDSPOT 15 CU. FT. FROSTFREE DELUXE REFRIGERATOR. [illegible] Originally 379.95. Floor model. Sale 279.99

1 ONLY — COLDSPOT 15 CU. FT. FROSTFREE REFRIGERATOR. [illegible] Originally 369.95. Sale 249.99

1 ONLY — COLDSPOT 14 CU. FT. FROSTFREE REFRIGERATOR. [illegible] Originally 344.95. Sale 254.99

1 ONLY—COLDSPOT 18 CU. FT. CHEST FREEZER. [illegible] Originally 369.95. Demonstrator of original 384.95. Sale 189.99

### Famous Name Electric Ranges

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*Clearance of Demonstrators and Floor Models*

4 ONLY—KITCHENAID' VARICYCLE TOP-LOADING PORTABLE DISHWASHERS. Deluxe Model KDA [illegible] Fills [illegible] Sale 389.95

2 ONLY — GENERAL ELECTRIC BUILT-IN UNDER-COUNTER DISHWASHERS. Twin detergent dispenser [illegible] Sale 389.95

2 ONLY — GENERAL ELECTRIC BUILT-IN UNDER-COUNTER DISHWASHERS. Twin detergent dispenser [illegible] Sale 389.95

2 ONLY — GENERAL ELECTRIC BUILT-IN UNDER-COUNTER DISHWASHERS. Twin detergent dispenser,

# Chiang Kai-shek still in firm control of Nationalist China

At the age of 68 and almost 20 years since the Communists forced him off China's mainland, Nationalist President Chiang Kai-shek still remains in firm control of his regime, reports Graham Trotter of the Ottawa staff of The Canadian Press in this third of a series based on a recent visit to Taiwan (Formosa).

By GRAHAM TROTTER

TAIPEI, Taiwan (CP) — Chiang Kai-shek at 68 still is firmly in control of the Chinese Nationalist government.

His authority here stands unchallenged although it is almost 20 years since he was forced off the mainland by the Chinese Communists, and 42 years since he succeeded the father of the Republic of China, Dr. Sun Yat-sen.

The statues on this island of Taiwan—also known as Formosa—are of Dr. Sun. His portrait is on the billboards. His brotherhood — particularly his philosophy of the Three Principles of the People, nationalism, democracy, the people's livelihood—are extensively quoted.

But some veteran Western observers here predict that Chiang, the disciple of Dr. Sun, will one day be revered as a greater national hero.

His health is reported to be that of a man of 50. He is said to be decisive and alert. His military bearing remains.

His relaxation is found in walking and the family circle, where he loves to don the loose-fitting Chinese long gown and prepare meals for his children and grandchildren. A Methodist, he regularly attends a non-denominational Protestant chapel.

He is both president of the Republic of China and, sometimes, or director-general of the ruling Kuomintang political party, presiding actively over the affairs of both.

In April elections the Kuomintang won 61 of the 71 seats at stake in the Taiwan provincial assembly and 17 of the 20 contests for city mayors and county magistrates.

A 51-year-old Democratic Socialist became mayor of Kaohsiung, the island's second largest city, on his sixth try. An independent won the mayor's chair in Taichung, the provincial capital.

Candidates toured heavily on scooters and sound trucks to drum up support on the streets, young girls keeping up a steady chatter on the mobile loudspeakers.

Public debates by the candidates were attended by thousands in a carnival-like atmosphere. The turnout for the secret ballot elections was better than 70 per cent.

Except for provincial and local elections, Chiang and the Kuomintang in effect still rule on the basis of the last constitutional national elections on the mainland in 1947 and 1948.

Under the constitution of the Republic of China there is a National Assembly, which elects the president and vice-president to six-year terms and can order their recall, and a law-making Legislative Yuan, both chosen by popular vote.

All 35 provinces of China, of which Taiwan is the smallest, have a voice in the selection of these two national bodies. But elections for them have been suspended because the mainland provinces cannot participate during the period of "the Communist rebellion."

Therefore, incumbents' terms—normally six years for the assembly and three for the legislature—have been extended indefinitely.

The first National Assembly had 2,961 delegates, the first Legislative Yuan 760 members. These numbers now are sharply lower because not all escaped to Taiwan, and those who did are growing old and death is taking its toll.

At present there are 1,464 in the assembly and 453 in the legislature.

Under the constitution, Chiang was elected president by the first National Assembly on the mainland in 1948. The predominantly-Kuomintang assembly has re-elected him to successive six-year terms on Taiwan in 1954, 1960 and 1966.

The assembly, which also has final say on constitutional matters, has granted him emergency powers during the civil war period.

A 1966 amendment by the assembly permits elections to fill vacancies in that body and also the legislature, and to choose additional representatives for Taiwan in recognition of the province's population increase.

Charges that Chiang's Kuomintang government is a dictatorship, albeit a benevolent one, are partly laughed by the absence of national elections.

His defenders contend that the Kuomintang and Mao Tse-tung's Communists still are locked in a civil war that prevents such elections under the present constitution.

To have Taiwan alone do the voting for national elective office would mean raising the island province to nation status, acceptance of the scorned two-China theory and abandonment of aspirations for mainland recovery.

The current vice-president and prime minister, C. K. Yen, a 63-year-old economist and former banker is generally regarded as Chiang's likely successor as president. He would succeed to that post in any case on Chiang's death, pending another assembly meeting.

Yet, who has held high government posts since 1936, served in the provincial administrations of both Fukien, in south China, and Taiwan before entering the national government. Bald, bespectacled, mild-mannered, and fluent in English, he was appointed prime minister by Chiang in 1963 and elected vice-president by the assembly in 1966.

Veteran observers tend to dismiss the possibility of a power struggle after Chiang. The Generalissimo's eldest son, Gen. Chiang Ching-kuo, 58, defence minister since 1965, would almost certainly be involved in any such struggle.

One line of betting is that Yen will become president, Chiang Ching-kuo will succeed his father as leader of the Kuomintang party and Yen as prime minister, or Gen. Huang Chieh, 65, the appointed governor of Taiwan province since 1962, will become prime minister. Yen was governor in 1954-57.

The two minor political parties, the Young China Party formed in 1923 and the Democratic Socialist Party established in 1932, have been faction-ridden. This lack of inner unity, now apparently healed, has prevented them from exerting much political influence.

The Young China Party has 85 members in the National Assembly and 13 in the Legislative Yuan; the socialists 46 and 13 respectively.

A so-called independence for Taiwan party formed in Japan by Chinese dissidents has little influence and no [illegible] base. Its leaders [illegible] Taiwan within the [illegible] Sears, one of them declared support for Chiang.

The socialists' platform calls for China to become a democratic socialist [illegible] democratic [illegible] production of [illegible] basic freedom.

The Young China Party manifesto [illegible] calls for Chiang's anti-Communist policy and the opposition [illegible] eventual [illegible] home and abroad [illegible] practical and militant [illegible] offensive against [illegible] gime.

## TODAY'S CHILD

By Helen Allen

This young man is David who will be two in a few days. Canadian Indian in origin, David is strong, active boy, interested in everything and learning quickly for he tries to imitate everything older children do. He likes babies too, always being sweet and gentle with them. He is a quiet, rather solemn child not at all demanding. He is apt to concentrate if he has to play by himself finding his best fun just me a small cardboard box. Yes, I feel boy has extreme which is being treated by diet, surgical shoes and splints. Though it is sometimes quite troublesome he is always good-natured nor a bit fretful. This condition is expected to be greatly improved when he has finished teething. He needs relaxed loving parents who will not be too insistent on background information nor unduly worried over his allergies. A Roman Catholic home is being sought for him. To inquire about adopting David, please write to Today's Child, Department of Social and Family Services, Parliament Buildings, Toronto 5.

corner

## cklebacks'

...sts of depres- ...lakes ...

...to coastal waters of the United States, ...ream to Virginia on the Atlantic side ...and to southern California on the Pacific side.

Finding a good spot on the bottom of a lake or stream, a male stickleback starts work- ...ing on his nest. He bites off pieces of water plants, and cements them with a sticky thread secreted from his body.

The nest grows, and takes the shape of a small ...ball- ...ing mound, the male leads a female and chases her. ...Impressed and willing, he ...mates ... to go ...in the nest to lay ... eggs.

Uncle Ray

For NATURAL section of your scrapbook.

### TWEET LIFE

BATHGATE, N.D. (AP)—The backyard of Stanley Belk's home is a ...racket of color ...and ... ...ed ... ...ed parrots in ...

...Belk ... some of the birds he raises them primarily as a hobby. It costs at least $100 a month to feed his flock the mixture of millet, oats and other grains "I don't ...make ... money ... the birds," he says. "But it keeps me from ...meddling ... thumbs since I retired."

## lay's child

Helen Allen

...write to Today's Child, Department of Social and Family Services, Parliament Buildings, Toronto 5.

he Swim

Likeable Lively Guy

## .L BRADY

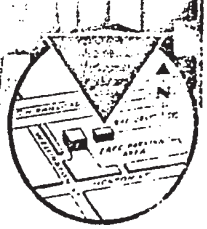
...ner of the grand prize winner in the

## PS IN POPS CONTEST

...Father's Day With The

THE LONDON FREE PRESS, -23

# SATURDAY 9 a.m. to 5.30 p.m.



- NO DOWN PAYMENT on Simpson's Credit Terms
- Sorry, No Phone or Mail Orders
- Ample FREE Parking
- Many Floor Samples and Demonstrators
- Everything Sold "As-Is"
- You're Sure to Find a Special Gift for Dad in This Big Listing of Specials

## ON-THE-HOUR Super Specials

At The Warehouse
- While They Last
- We Reserve the Right to Limit Quantities
- Sorry, No Phone or Mail Orders

### — 9 a.m. Saturday —

1 ONLY — "ELECTRO-MOIST" HUMIDIFIER. Suitable for 7 or 8 room furnace. Variable speed control. Water level indicator. Humidistat ensures Originally 89.95. Demonstrator. Sale 32.99

1 ROLL ONLY — NYLON BROADLOOM, 12" wide. Antique Gold color. Regularly 6.95. Square yard 5.99

1 ROLL ONLY — NYLON BROADLOOM, 12' wide. Red. Regularly 6.95. Square yard 5.99

2 ONLY — 3-PIECE PICNIC SETS. Table and two benches in California Redwood finish. Originally 54.50 3-piece set 36.88

1 ONLY — RURAL MAIL BOX. 3. White baked-on enamel finish, 2 wide aluminum finish. Regular size. Regularly 19.95. Each 11.99

20 ONLY — FAN TRELLISES. Color construction 6 air flow size Regularly 3.19 and 3.45. Each 2.99 and 3.29

### — 10 a.m. Saturday —

1 ONLY — "KENMORE" DELUXE 30" ELECTRIC RANGE. Includes 4 switches. Automatic oven — minute minder, deluxe ...serie, ultra-fast oven heat. Full length surface light, oven light, large storage drawer. Originally 209.95. Demonstrator 149.99

1 ONLY — PORTABLE TELEVISION SETS. 19-in. rectangular cabinet. Brings normal clear pictures. Ideal for the cottage Each $100

2 ONLY — CHAISETTES. Heavy duty vinyl webbed. Fully plastic arm rests. Solid sturdy frames. Originally 19.95. Each 16.88

4 ONLY — 8-FOOT LENGTHS OF TRADE PATTERN VINYL GARDEN HOSE. Rich, durable green color. Tropical construction. Brass ...coupling. Regularly 5.79. Special length 4.99

### — 12 Noon Saturday —

1 ONLY — "COLDSPOT" 12 CU. FT. FROST-FREE DEFROST 2-DOOR REFRIGERATOR. Has ...zer ... Twin ...ervation crispers. Twin ...for door ... Only. Originally 329.95. Floor model 279.99

15 ONLY — LAWN ...ers. Rotary ...ers ... ...ed, each ... ...ers. Regularly 3.29 to 10.95. Each 2.79 to 15.25

### — 2 p.m. Saturday —

1400 ONLY — LINOLEUM TILES. 12 x 12 ... in heavy ... Cushioned ... Rings-Brown ... Sub-standard. Regularly 35c. Each 20¢

2 ONLY — CALIFORNIA REDWOOD COFFEE TABLES. Round. Originally 17.95. Each 12.99

## Famous Name Refrigerators — Freezers

Great buys here for home and cottage.

1 ONLY — "COLDSPOT" 15 CU. FT. FULLY FROST-LESS REFRIGERATOR. 2-door freezer with 3 shelves. Full width crisper. Refrigerator section has 2 ...shelves. Full width ...storage. Magnetic door ... 6' high x 28" wide. Antique copper finish. Each 259.99

1 ONLY — "COLDSPOT" 12 CU. FT. FROST-FREE REFRIGERATOR. 2-door freezer, full width crisper, ...ree ...shelves on door ... 5' high x 28" wide. Antique copper finish. Floor model Originally 329.95. Sale 284.99

1 ONLY — "COLDSPOT" 2-DOOR 14 CU. FT. FROST-LESS REFRIGERATOR. 2-door freezer. Refrigerator section has 2 full width shelves. Refrigerator section has ...shelves and ...shelf. Twin porcelain crispers. Butterproof meat keeper. Separate shelf for ... 5' high x 28" wide. Decorator white finish. Floor model Originally 329.95. Demonstrator. Sale 269.99

1 ONLY — "COLDSPOT" 15 CU. FT. 2-DOOR FROST-LESS REFRIGERATOR. 2-door freezer has 2 full-width ...ing ice trays and full width shelf. Refrigerator section has 2 full width porcelain crispers, ...shelves and ...shelf. Butterproof meat keeper. Dairy bar. Egg ...ser. Twin ...for ... Left-hand ... Floor model Originally 409.95. Demonstrator. Sale 314.99

1 ONLY — "COLDSPOT" 15 CU. FT. CHEST FREEZER. ... ... of ... ... ... ... Automatic interior light. Regularly 199.95. Sale 179.99

1 ONLY — "COLDSPOT" 11 CU. FT. DELUXE FROST-LESS REFRIGERATOR. 2-3 ... freezer. Refrigerator ... Twin ... Butter compartment. Adjustable ...makers. Automatic ... Separate ... Twin ... and ... Silver finish with left-hand door ... Floor model Originally 499.95. Sale 374.99

1 ONLY — "COLDSPOT" DELUXE 22 CU. FT. CHEST FREEZER. ... ... of ... ... Porcelain ... Automatic ... Counter ... Floor model Originally 299.95. Sale 239.99

1 ONLY — "COLDSPOT" 13 CU. FT. AUTOMATIC DEFROST REFRIGERATOR. ... ... ... ...

## APPENDIX C

### Description of Sample Design and Procedures

This study was concerned with comparing differences between two different socio-economic groups; upper and upper-middle class versus lower and lower-middle class. For this reason, before sampling commenced, specific London City census tracts were selected on the basis of average income as reported in the D.B.S. 1961 Census (the latest available D.B.S. data reporting income by census tract) to provide two different geographic areas to be sampled.

Within each of these areas a random block sample was selected, designed to yield 150 completed interviews. A total of 28 block locations, with six interviews to be completed at each location, were selected in each of the areas by the procedures listed below:

1. Selection of Blocks

Using 1966 D.B.S. Census data, the number of households within the census tracts specified for each area was accumulated by enumeration areas. A skip-interval in terms of households was calculated by dividing the total number of households by the number of block locations required (28). The first block location was then selected using random numbers from 1-N where N is the household skip interval. This latter procedure identified the enumeration area in which the block location was to be selected. The specific block location within the enumeration area was selected by using random numbers with each block in the enumeration area assigned one number.

This procedure was continued, with the second enumeration area selected based on the first block plus N and the specific block location selected in the manner outlined above; the third enumeration area based on the first block plus 2-N and so on.

2. Selection of Households at Block Locations

Once a block was selected by the above process, a start-point for the interviewer was determined by selecting one of the four corners of the block at random, using random number tables, and then selecting, again from random number tables, the first to sixth dwelling in a counter-clockwise direction from the selected corner. The interviewer then called on every second dwelling moving around the block until six interviews were completed. If the interviewer proceeded around the block without completing six interviews, she continued around again calling on dwellings not interviewed in the first circuit. If the block selected did not yield six completions following this procedure, the interviewer proceeded to an adjacent block and continued until reaching her quota.

London Free Press Report on Patton's Place Conviction for Misleading Advertising



The London Evening Free Press
THURSDAY, NOVEMBER 21, 1968—SECTION THREE—PAGES 35 - 50



# Closer education, recreation links urged to utilize schools fully

By NEIL MORRIS
of The Free Press

TORONTO — Proposals aimed at closer ties between municipal education and recreation functions came out at a workshop drawing hosted here Wednesday.

The proposed changes, one step short of calling for outright amalgamation of the two functions, took shape during the final session of a three-day department of education sponsored workshop on the design and use of community schools in Ontario.

Among the proposals at the conference was one calling for a study of the feasibility of amalgamating municipal education and recreation services.

Other proposals, which, while not calling for the immediate marriage of the two departments, took steps in that direction, were the call for appointment of a permanent standing committee of the Ontario legislature to act as an advisory body on post education - recreation matters and another recommending the consolidation of recreation legislation into one department.

Other proposals discussed by the 200 education, recreation and school design authorities at the conference included one calling for the county boards of education coming into being in January.

If adopted, one proposal would urge county boards to appoint a director of leisure education, while another calls for consideration of the development of education, recreation and social services on a county or even regional basis. Ideally, this would occur by 1970.

Another urges municipal councils to appoint a coordinating committee for education, recreation and social services. Neighborhood or municipal co-ordinating committees that would ensure co-operation and sound development of the various fields were also urged.

Conference chairman Ken Mantrop, superintendent of schools for the Pickering Township school area said the proposals, while aimed at amalgamation of education and recreation facilities, should not be viewed as "education absorbing recreation".

The aim he said was for the creation of a broader education base of which recreation on a community wide basis would be a major part.

Stan Orlando, head of the school planning and building section of the department of education called the workshop another step forward in bringing school and recreation authorities together for mutual solutions to problems.

From the outset of the conference, there were echoes from the province wants and needs in regard to school and recreation.

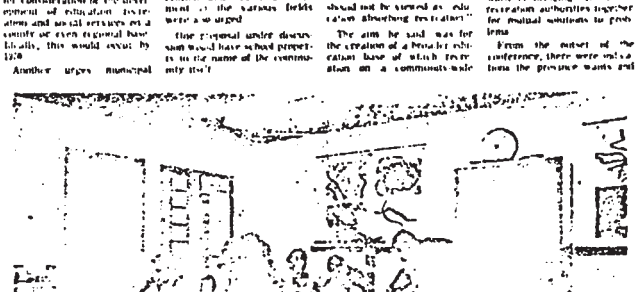
Delegates from the province's north and south were unanimous in their call for more money for recreation facilities in the province's northern areas.

Dr. Alan Thomas, president of the Canadian Association for Adult Education said the province should be more generous in its assistance to recreation facilities in the province's northern areas.

Mrs. Dorothy Dorsey, an author of a book on community schools and recreation said the province should be more generous in its assistance to recreation facilities in the province's northern areas.

Seek another townhouse

# Whitehills parents' group protests transfers of pupils



—By Ernie Lee of The Free P

Two classes share this room in a converted Whitehills townhouse, the pupils at right facing another way to avoid distractions. Parents are pressing the board of education to rent a second four-unit townhouse rather than bus children to distant schools. Construction of a new school has been delayed

About shoemakers, eyesores, and hope

# Urban renewal chief needled over project

# Hospital committee studies space needed for transplants

## City capital budget due soon

## Skinner firm rehires fired mechanic

## Two teen-age girls recipients of kidneys in double transplant

By GEORGE HUTCHISON
of The Free Press

## City firm fined $200 over misleading ad

## 25 persons arrested on break-in charges

## City to try to market bond issue

## BIRTHS RISE

## London mother of two, student, 19, jailed 10 days for shoplifting

## Fire calls

# City firm fined $200 over misleading ad

Magistrate E. H. A. Carson today found Patton's Place Ltd. guilty of placing a misleading advertisement in The London Free Press earlier this year, and fined the firm $250 plus costs of about $100.

Magistrate Carson said the Jan. 29 advertisement, which offered the public a $100 savings on a wringer washing machine, "was a misleading representation to the public." The Wharncliffe Road South firm was charged under the federal Combines Investigation Act.

The maximum fine under the act is $500.

The magistrate stressed several times during his judgment, delivered today following the Nov. 7 trial, that there was "no suggestion at all that the public was not getting value for the machine advertised for $129.95."

Crux of the federal government's case rested on the manufacturer's "regular" price of $229.95 used by Patton's Place as a comparison for its special sale price of $129.95. Evidence showed that the manufacturer of the washing machine in question did not have such a list price, nor had any of the particular washers ever sold anywhere in the London area for $229.95. The highest price had been $169 earlier in 1967.

But the magistrate said that with Patton's Place getting less than $20 profit per machine, as had been outlined during the earlier trial, the public "got a bargain." This was not in question, he said.

Defence counsel Edward Richmond asked the court to consider that Patton's had been "most careful of the wording in its advertisements since the charge was laid."

Special crown prosecutor Martin Morrisey applied for an order prohibiting Patton's from repeating such misleading advertising. This was not granted by Magistrate Carson, who pointed out the act allowed the prosecution three years to re-apply for such an order if Patton's repeated advertising that appeared to be misleading.

Patton's had argued they used the manufacturer's suggested list price for a similar washing machine in establishing their $229.95 figure in the advertisement. This was intended to be a guide to value for the prospective purchaser.

Magistrate Carson disagreed. He said the regular price was the one established by purchases in the area during the time of the sale and that that was $129.95, not the $100 greater figure.

He said the Patton's advertisement led the prospective purchaser to believe he would have had to pay $100 more elsewhere unless he bought the washer from Patton's.

# City to try to market bond issue

Within the next two weeks, probably, London will go to the bond market in an attempt to sell $7,234,816 in debentures —the first time the city has sold bonds since December, 1968.

Board of control Wednesday authorized finance commissioner Orton Logan to prepare the bond issue for tender on the Canadian market.

The last time, the city placed $7,972,484 in debentures on the market at a price of $97.503 per $100.

High interest rates have kept the city away from the market for almost two years. Capital works projects have been financed through short-term loans.

The tenders should be ready before city council's next regular meeting Dec. 3. If the tenders are unfavorable there is every likelihood no tender will be accepted, the board indicated.